
Executive Report on Large Corporate Pension Plans 1984

7th Annual Edition

Johnson & Higgins

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Introduction

In the 10 years since ERISA (the Employee Retirement Income Security Act of 1974), pension plans have been accused of being underfunded and overfunded, undertaxed and overtaxed, underregulated and overregulated, top heavy, expensive, and fat. What no one disputes is their size and the inevitable impact of pension plans on the rest of the economic system.

George Orwell's pessimism aside, 1984 looks promising for private pensions. The Department of Labor estimates the nation's retirement plan assets to exceed one trillion dollars. One quarter of those assets are controlled by the Fortune 500 industrial and 200 non-industrial companies studied in this survey. Their money management and corporate policy decisions have immediate implications for the entire business sector.

The 1984 JOHNSON & HIGGINS *Executive Report On Large Corporate Pension Plans* looks at the effect of private pension plan expense on the continuing operations of large corporations. At the corporate planning table, salaries, taxes, shareholder dividends, pension expense, and net profits all come out of the same pie. The adequacy of a company's pension fund to pay promised benefits is as much a product of corporate financial decisions as it is of sound pension management.

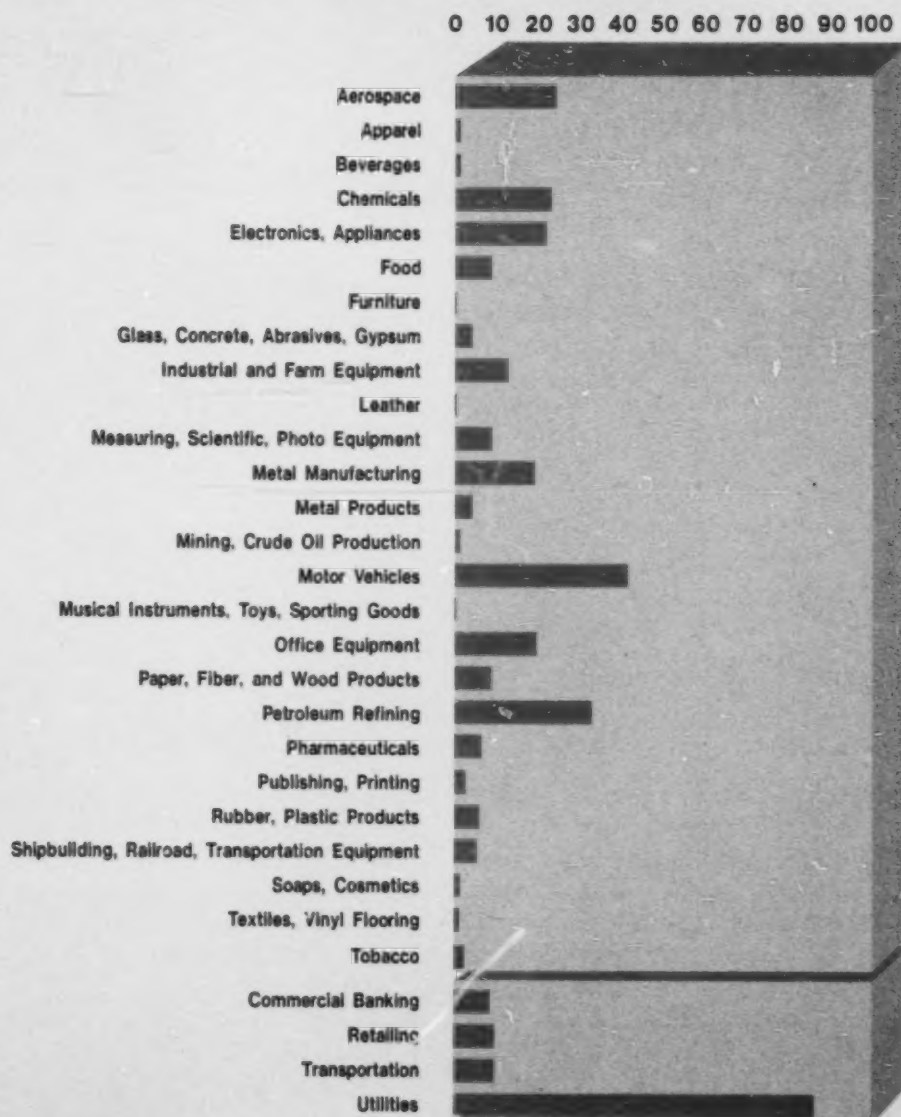
The survey summarized in the **Pension Expense** section of the J&H *Executive Report* presents a picture of the nation's private sector pension expense relative to companies' pretax profits, number of employees, and employee compensation. A review of the 10-year experience of three industry giants highlights their financial decisions by comparing earnings per share to dividends per share, and by measuring the cost to shareholders for employee pensions over the past decade.

The corporate financial data in this Report was obtained from Standard & Poor's Compustat Services Inc.

Who controls the nation's \$1 trillion retirement assets?

More than 25% — \$297 billion — belongs to the pension plans of these 700 companies. Of this amount, 32% is concentrated in the petroleum refining industry and the utilities.

Pension Assets Billions Of Dollars



An aggregate \$27.3 billion was the price of pensions to the companies in the study group in 1983. Predictably, this represents a decline from 1982, continuing the downtrend first noted in last year's study. In almost every industry group, pension funds' higher earnings and more aggressive investment philosophies produced significant actuarial gains that, in turn, contributed to the 4.7% decline in reported expense. Plan terminations were not a major factor in the study group.

On the whole, there was no significant reduction in work force from 1982 to 1983, although many individual companies do not yet show the effects of the recovery. Nonetheless, per capita pension expense declined, suggestive again of sound assets/liabilities management. As a percentage of pretax profits, pension expense for the 500 Industrials maintained its 11%–14% share for the seventh consecutive year. A close look at the interaction of plan assets and liabilities and corporate net worth further highlights the active financial manage-

ment that has put pension plans on the strategic planning boards of the nation's largest and most effective companies.

Ten years ago, dire predictions of hard economic times, coupled with the stiff new cloth of ERISA regulation, prompted many to declare private sector pension plans unaffordable. For the past seven years, the Johnson & Higgins *Executive Report On Large Corporate Pension Plans* has documented reasons for a much more optimistic outlook. Half a century of employee benefit and actuarial consulting has given us, we believe, a more seasoned viewpoint.

Over the ensuing years, the ability of the private sector to support its pension commitments has been consistently sound, despite occasional aberrations. In general, large corporate pension plans have weathered every kind of buffeting — economic, legislative, tax, collective bargaining — and, given astute overall financial management, seem able to continue to do so.

In a recent *Seven Minute Survey*, Johnson & Higgins studied the opinions of investment analysts with respect to evaluating reported pension data. While the survey addressed financial disclosure standards, the results underscore the interest of the financial sector in pension management as an indicator of a company's financial strength.

The pension plans studied are those of corporations listed in the 1984 FORTUNE Directories, ranked by sales:

- The "Industrials" — the 500 largest industrial companies
- The "Non-Industrials" —
 - the 50 largest commercial banking companies
 - the 50 largest retailers
 - the 50 largest transportation companies
 - the 50 largest utilities

Comparison of dollars and percentages with previous *Executive Reports* will not be exact, since information included in the survey changes from year to year. Changes in FORTUNE rankings displace some corporations and shift others among the classes indicated by rank. The industry group assigned to each company by the FORTUNE Directories might also change from year to year. For some of our exhibits, changes in available information — for example, the number of employees or the interest rate assumed for calculating pension values — might affect the survey population.

The data reflect changes in corporate name and other company changes through August 1, 1984. Companies that were acquired or merged with other companies subsequent to the publication of the FORTUNE Directories are not included. The *Appendix* lists all the surveyed companies.

Principal data were obtained from each company's annual report to shareholders. Data shown for the 1983 fiscal year reflect disclosures in companies' latest annual reports, ending on or before March 31, 1984. Data shown for the 1982 fiscal year or previous years reflect disclosures in previous annual reports, unless otherwise indicated.

The pension expense included in a company's income statement is primarily governed by Opinion Number Eight of the Accounting Principles Board. Many companies seek to maintain a consistency between the funding of their pension plans and the costs disclosed in financial statements. Since neither the accounting profession nor the government issues rules requiring such consistency, the pension expense reported in annual reports should not be seen as a strict indication of the level of contributions to pension funds.

Annual report footnote disclosure of pension assets and benefit values is governed by Financial Accounting Standards Board (FASB) Statement Number 36. The information is designed to reflect the financial condition of the plan on an ongoing basis consistent with generally accepted accounting principles. As with expense disclosure, figures might differ from those used for other purposes, such as establishing funding objectives or determining termination liability.

Pretax profits, as reported, exclude pension expense. To develop pension expense as a percentage of pretax profits, we have added back this expense to arrive at the total pretax denominator. This practice is consistent with previous *Executive Reports*.

About the Composite Company

The term *composite company* refers to a hypothetical company with experience equivalent to the weighted average of results presented in each section of this report. Because the sample for one exhibit might vary slightly from the sample for another exhibit, the composite company is not exactly the same throughout; the differences, however, are negligible enough to permit treatment of the composites as a single unit.

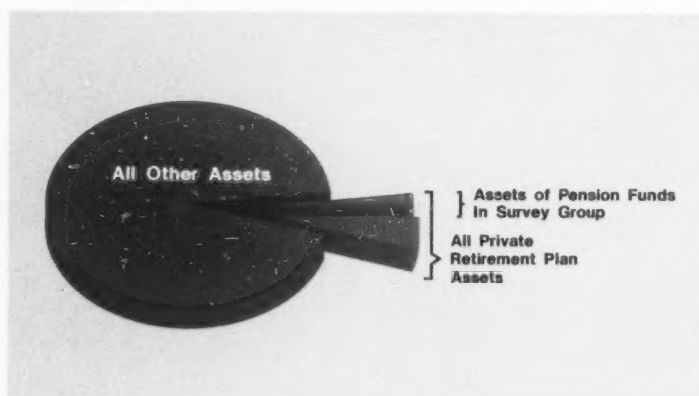
1. About the Companies Surveyed, 1984

The 700 companies in the Fortune/J&H universe are the leaders in 26 industries and 4 non-industrial groups. They employ about 20 million people — 23% of the nation's work force. The \$297 billion they hold in pension assets is 2% of the nation's \$14 trillion asset holdings as of December 31, 1983, and almost 30% of reported private retirement plan assets.

The largest single transaction recorded by the New York Stock Exchange in 1983 — 7 million shares of Ramada Inn traded on May 25 at 10½ — was a mere 4% of the \$1.8 billion av-

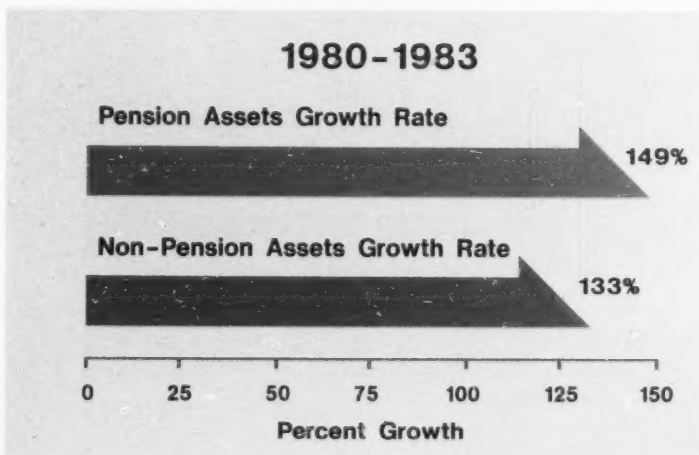
erage plan assets of the top 100 industrial companies.

Pension information was reported by 94% of the survey companies. Thirty-nine companies in the survey group are not represented in the study. Thirteen of these companies are wholly owned subsidiaries and are consolidated in the parent companies' figures; 11 foreign-owned and 13 privately or cooperatively held companies are not required to file annual reports; 2 companies filed annual reports too late to be included in the survey.



Total asset holdings in the nation were \$14.273 trillion in 1983.¹ Private retirement plans account for over \$1 trillion, by Department of Labor estimates, with \$297 billion in the surveyed plans.

¹According to the National Accounts as reported by the U.S. Federal Reserve Bank.



From 1980 to 1983, the growth rate of the 700 pension funds in the survey group outran the growth of the rest of the nation's assets holdings by 16 percentage points.

Exhibit 1. About the Companies Surveyed

By Fortune 500 Ranks	Number Of Companies In Fortune Universe	Number Of Companies In J&H Survey	Percentage Of Fortune-Ranked Companies In J&H Survey
Fortune 1-100	100	100	100%
Fortune 101-200	100	98	98%
Fortune 201-300	100	88	88%
Fortune 301-400	100	93	93%
Fortune 401-500	100	89	89%
Total	500	468	94%
By Industry Group			
Aerospace	17	16	94%
Apparel	12	12	100%
Beverages	12	9	75%
Chemicals	43	36	84%
Electronics, Appliances	47	47	100%
Food	56	46	82%
Furniture	1	1	100%
Glass, Concrete, Abrasives, Gypsum	16	16	100%
Industrial and Farm Equipment	38	36	95%
Leather	1	1	100%
Measuring, Scientific, Photographic Equipment	16	16	100%
Metal Manufacturing	26	24	92%
Metal Products	21	20	95%
Mining, Crude Oil Production	10	10	100%
Motor Vehicles	15	15	100%
Musical Instruments, Toys, Sporting Goods	5	5	100%
Office Equipment (including computers)	18	18	100%
Paper, Fiber, and Wood Products	29	27	93%
Petroleum Refining	36	34	94%
Pharmaceuticals	20	20	100%
Publishing, Printing	19	19	100%
Rubber, Plastic Products	11	11	100%
Shipbuilding, Railroad, Transportation Equipment	9	8	89%
Soaps, Cosmetics	9	8	89%
Textiles, Vinyl Flooring	10	10	100%
Tobacco	3	3	100%
By Fortune 50 Non-Industrial Groups			
Commercial Banking	50	48	96%
Retailing	50	48	96%
Transportation	50	47	94%
Utilities	50	50	100%
Total	200	193	97%
Industry & Non-Industry Total	700	661	94%

Pension Expense

The motor vehicles industry — 15 of the Fortune 500 companies — shows the second highest pension expense reported in 1983 (\$3 billion) and the highest pension expense per company (\$204 million).

The 50 utilities companies charged \$4.3 billion to pension expense.

One steel company in our study reports \$309 million for pensions in 1983 — 15% more than the \$270 million allocated to improvement to plants and equipment.

The PENSION EXPENSE part of this study looks at pensions as part of the cost of doing business. In the next few chapters, we examine changes in reported expense from year to year and restate the amount expensed for pension plans as a percentage of pretax profits, as a per capita cost, and as a percentage of compensation. Whenever information is available, we identify 10-year trends.

2. Change in Pension Expense, 1983 from 1982

Fifty-two percent of the companies included in Exhibit 2 report less pension expense in 1983 than in 1982. The number is nearly 60% if limited to the 500 Industrials.

Our composite company reported a 4.7% drop in pension plan expense from 1982 to 1983, from \$28.6 billion to \$27.3 billion.

Over the past five years, few corporations reported the steady climb in pension expense evident immediately after ERISA. Many realized a substantial increase in the value of plan assets, saw employment levels fall and rise, and revised actuarial assumptions at least once.

Overall, a number of factors contributed to the decline in pension plan expense:

- Unanticipated investment earnings, in excess of actuarial assumptions, due to 1981 and 1982 market performance
- Dedicated or immunized asset portfolios designed to fulfill very high earnings rate assumptions
- Salary increases at lower than assumed rates
- Recessionary drop in work force, with turnover, including layoffs, at faster-than-assumed rates
- Reductions in benefits and other changes in benefit formulas
- Growing prevalence of alternative or supplemental plans such as 401(k) profit-sharing and thrift plans, which are not always characterized as pension plans in annual reports and, therefore, are not always included in pension expense

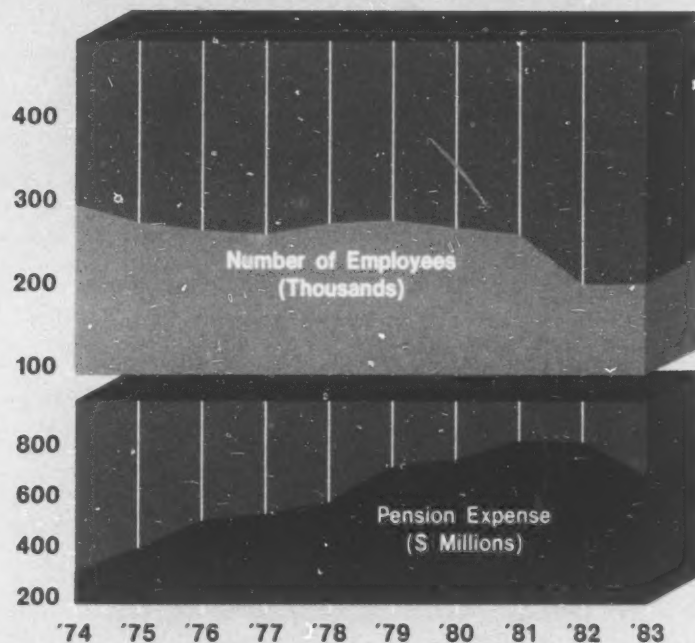
- Full amortization of past service liabilities
- Termination of retirement plans, although this does not appear to be a significant influence in the survey group.

For the companies reporting an *increase* in pension expense, 10% is the mean. Twenty-three percent of our sample report less, 26% report more. The smaller increase is common to firms not significantly affected by the recession. At these companies, inflationary pressure on compensation and benefits continued, and work forces either remained stable or grew. Plan benefit improvements might also have been a factor in the increase.

A greater than 10% change in plan expense might be, in some cases, the result of a merger or acquisition.

A WORD ABOUT STATISTICS: Statistics can be dominated by large companies. For example, the statistics for the utilities group are influenced to a very large extent by the sheer size of American Telephone and Telegraph. If AT&T were removed from the group, the remaining companies would show a composite *increase* of 5% in total pension expense. Ironically, the entity known as AT&T on December 31, 1983 will influence the utilities' statistics even more in next year's *Report*, despite the break-up into smaller independent companies. Each of the smaller companies will itself be large enough to be a "Top 50" company, and will displace non-AT&T companies from the sample.

Total Pension Expense Compared To Total Number Of Employees Four Largest Metal Manufacturers



Metal manufacturing is typical of labor intensive industries. The survey indicates a bottoming out of the recessionary drop in employment. However, the stabilization of employment levels in 1983 will not show up in pension expense patterns until next year. For 1983, metal manufacturers report the same general decline in pension expense experienced by the survey group as a whole.

Exhibit 2.

Change in Pension Expense, 1983 from 1982

By Fortune 500 Ranks	Number Of Companies	Composite Change In Pension Expense			Average Pension Expense Per Company	
		Pension Expense (\$ Millions)		Composite Change	(\$ Millions)	
		1983	1982		1983	1982
Fortune 1-100	97	\$13,873.8	\$14,103.6	- 1.6%	\$143.0	\$145.4
Fortune 101-200	98	3,085.7	3,437.3	- 10.2%	31.5	35.1
Fortune 201-300	82	1,196.4	1,208.6	- 1.0%	14.6	14.7
Fortune 301-400	86	831.7	926.0	- 10.2%	9.7	10.8
Fortune 401-500	81	414.0	437.3	- 5.3%	5.1	5.4
Total	444	\$19,401.6	\$20,112.8	- 3.5%	\$ 43.7	\$ 45.3
By Industry Group						
Aerospace	16	\$ 1,592.1	\$ 1,593.4	- 0.1%	\$ 99.5	\$ 99.6
Apparel	11	110.2	121.8	- 9.5%	10.0	11.1
Beverages	9	190.6	167.2	14.0%	21.2	18.6
Chemicals	35	1,471.4	1,493.7	- 1.5%	42.0	42.7
Electronics, Appliances	44	2,113.2	2,254.5	- 6.3%	48.0	51.2
Food	44	772.0	774.0	- 0.2%	17.5	17.6
Furniture	1	0.6	1.0	- 40.0%	0.6	1.0
Glass, Concrete, Abrasives, Gypsum	14	358.7	398.7	- 10.0%	25.6	28.5
Industrial and Farm Equipment	35	976.4	1,098.2	- 11.1%	27.9	31.4
Leather	1	4.7	5.2	- 9.6%	4.7	5.2
Measuring, Scientific, Photographic Equipment	16	569.3	602.4	- 5.5%	35.6	37.6
Metal Manufacturing	23	1,230.4	1,514.9	- 18.8%	53.5	65.9
Metal Products	18	289.2	327.0	- 11.6%	16.1	18.2
Mining, Crude Oil Production	10	144.9	148.4	- 2.4%	14.5	14.8
Motor Vehicles	15	3,060.4	2,941.1	4.1%	204.0	196.1
Musical Instruments, Toys, Sporting Goods	5	28.3	36.4	- 22.3%	5.7	7.3
Office Equipment (including computers)	13	1,710.3	1,711.3	- 0.1%	131.6	131.6
Paper, Fiber, and Wood Products	26	453.5	485.6	- 6.6%	17.4	18.7
Petroleum Refining	33	2,490.6	2,643.7	- 5.8%	75.5	80.1
Pharmaceuticals	20	469.6	476.6	- 1.5%	23.5	23.8
Publishing, Printing	17	229.2	229.6	- 0.2%	13.5	13.5
Rubber, Plastic Products	11	315.4	344.3	- 8.4%	28.7	31.3
Shipbuilding, Railroad, Transportation Equipment	7	351.2	255.2	37.6%	50.2	36.5
Soaps, Cosmetics	7	137.7	135.4	1.7%	19.7	19.3
Textiles, Vinyl Flooring	10	73.3	83.0	- 11.7%	7.3	8.3
Tobacco	3	258.4	270.3	- 4.4%	86.1	90.1
By Fortune 50 Non-Industrial Groups						
Commercial Banking	47	\$ 552.0	\$ 572.6	- 3.6%	\$ 11.7	\$ 12.2
Retailing	40	1,355.3	1,352.3	0.2%	33.9	33.8
Transportation	43	1,635.9	1,453.0	12.6%	38.0	33.8
Utilities	50	4,337.3	5,144.3	- 15.7%	86.7	102.9
Total	180	\$ 7,880.5	\$ 8,522.2	- 7.5%	\$ 43.8	\$ 47.3
Industry & Non-Industry Total	624	\$27,282.1	\$28,635.0	- 4.7%	\$ 43.7	\$ 45.9

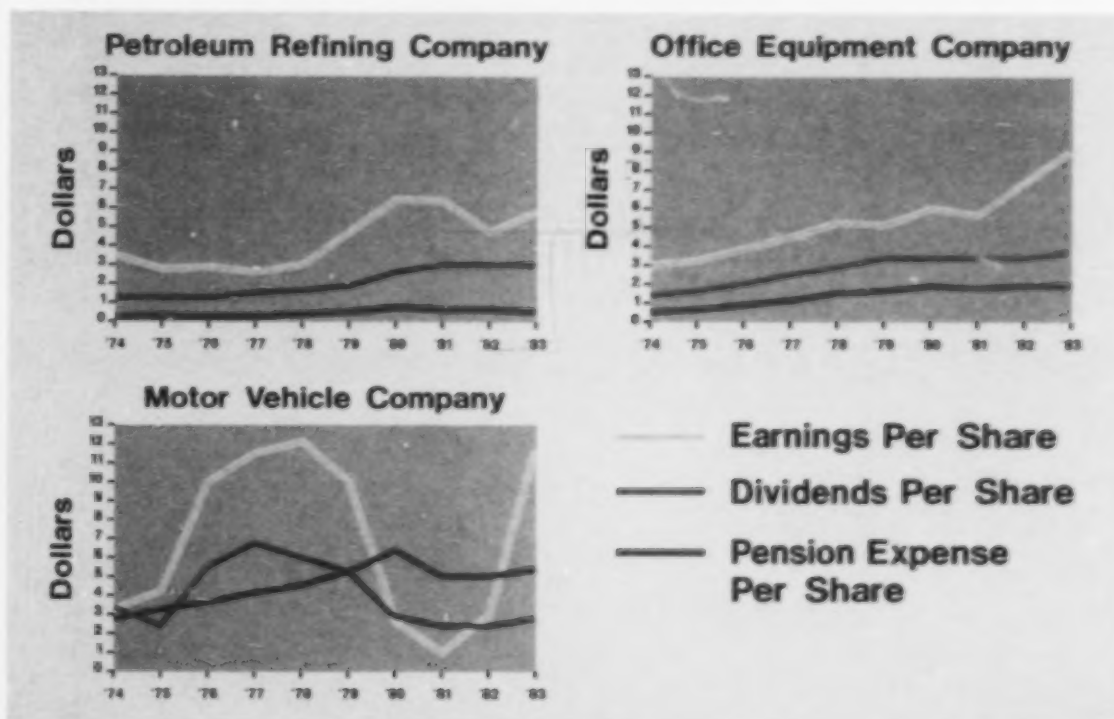
Detailed Distribution Of Change In Expense

Decrease	Increase Of 0-9.9%	Increase Of 10-19.9%	Increase Of 20-29.9%	Increase Of 30-39.9%	Increase Of 40-49.9%	Increase Of 50% Or More
57 (59%)	23 (24%)	8 (8%)	3 (3%)	1 (1%)	2 (2%)	3 (3%)
75 (77%)	12 (12%)	4 (4%)	4 (4%)	2 (2%)	1 (1%)	0 (0%)
43 (52%)	23 (28%)	7 (9%)	2 (2%)	3 (4%)	0 (0%)	4 (5%)
50 (58%)	14 (16%)	9 (10%)	7 (8%)	4 (5%)	1 (1%)	1 (1%)
39 (48%)	19 (23%)	13 (16%)	4 (5%)	1 (1%)	3 (4%)	2 (2%)
264 (59%)	91 (21%)	41 (9%)	20 (5%)	11 (2%)	7 (2%)	10 (2%)
10 (63%)	2 (13%)	3 (19%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)
3 (27%)	4 (36%)	3 (27%)	1 (9%)	0 (0%)	0 (0%)	0 (0%)
2 (22%)	5 (56%)	0 (0%)	1 (11%)	0 (0%)	1 (11%)	0 (0%)
21 (60%)	8 (23%)	1 (3%)	2 (6%)	1 (3%)	1 (3%)	1 (3%)
22 (50%)	12 (27%)	4 (9%)	4 (9%)	1 (2%)	1 (2%)	0 (0%)
23 (52%)	6 (14%)	6 (14%)	2 (5%)	4 (9%)	0 (0%)	3 (7%)
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
12 (86%)	2 (14%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
30 (86%)	3 (9%)	1 (3%)	0 (0%)	1 (3%)	0 (0%)	0 (0%)
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
6 (38%)	5 (31%)	2 (13%)	2 (13%)	0 (0%)	0 (0%)	1 (6%)
21 (91%)	2 (9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
13 (72%)	4 (22%)	0 (0%)	0 (0%)	1 (6%)	0 (0%)	0 (0%)
5 (50%)	3 (30%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)
9 (60%)	5 (33%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
3 (60%)	0 (0%)	1 (20%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)
7 (54%)	3 (23%)	1 (8%)	0 (0%)	0 (0%)	2 (15%)	0 (0%)
16 (62%)	5 (19%)	3 (12%)	0 (0%)	1 (4%)	0 (0%)	1 (4%)
23 (70%)	7 (21%)	1 (3%)	0 (0%)	0 (0%)	1 (3%)	1 (3%)
7 (35%)	4 (20%)	6 (30%)	1 (5%)	0 (0%)	0 (0%)	2 (10%)
5 (29%)	5 (29%)	5 (29%)	0 (0%)	2 (12%)	0 (0%)	0 (0%)
9 (82%)	0 (0%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
5 (71%)	0 (0%)	0 (0%)	1 (14%)	0 (0%)	0 (0%)	1 (14%)
2 (29%)	3 (43%)	0 (0%)	1 (14%)	0 (0%)	1 (14%)	0 (0%)
6 (60%)	2 (20%)	0 (0%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)
2 (67%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
18 (38%)	14 (30%)	8 (17%)	4 (9%)	0 (0%)	1 (2%)	2 (4%)
16 (40%)	10 (25%)	6 (15%)	4 (10%)	2 (5%)	0 (0%)	2 (5%)
12 (28%)	13 (30%)	11 (26%)	1 (2%)	1 (2%)	3 (7%)	2 (5%)
12 (24%)	16 (32%)	16 (32%)	3 (6%)	2 (4%)	0 (0%)	1 (2%)
58 (32%)	53 (29%)	41 (23%)	12 (7%)	5 (3%)	4 (2%)	7 (4%)
322 (52%)	144 (23%)	82 (13%)	32 (5%)	16 (3%)	11 (2%)	17 (3%)

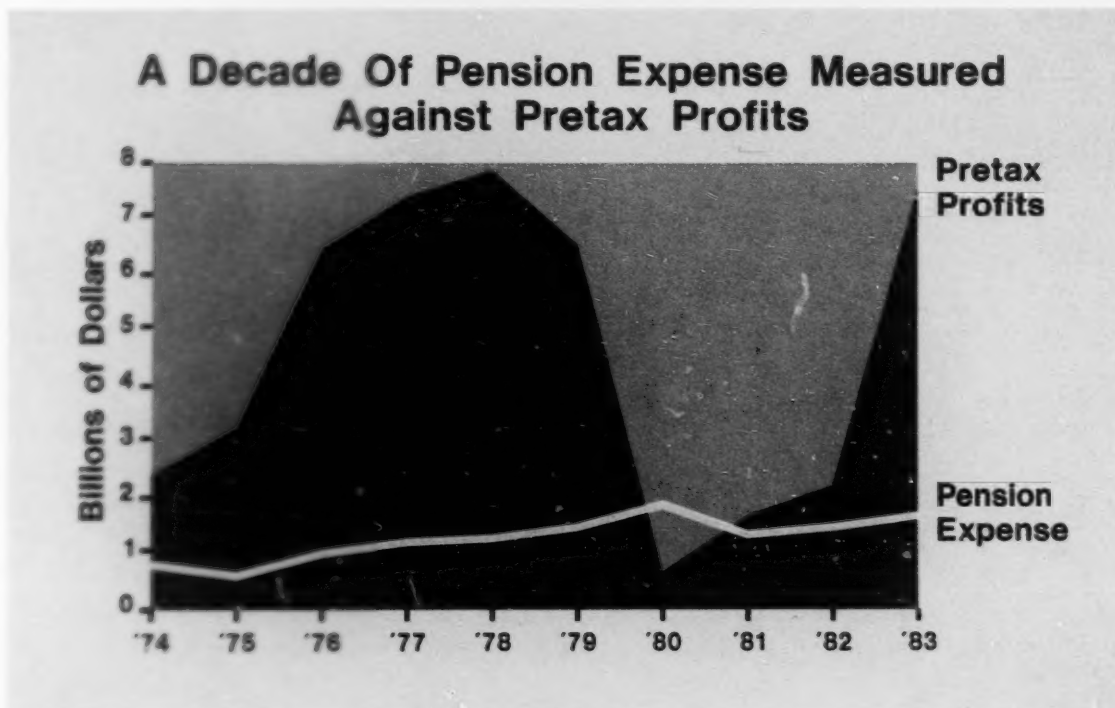
3. Pension Expense as a Percentage of Pretax Profits, 1983 and 1982

The ratio of pension expense to pretax profits among the 500 Industrials has not changed significantly since we began tracking these data in 1977. The expense/profit ratio dropped from 13.6% in 1982 to 11.5% in fiscal 1983 — the lowest per profit dollar since 1976. The 1983 rate for the composite company in our study is 13%.

In all, 567 companies show pretax profits before accounting for pension expense. Nine companies report pretax losses, and are excluded from the composite ratio as in prior years.



How does pension expense look next to earnings per share and earnings distributed to shareholders? The graphs trace a 10-year history of three leaders in the petroleum refining, office equipment, and motor vehicles industries.



A decade of pension expense measured against pretax profits

Although pension expense as a percentage of profits is consistent from year to year across the universe of companies surveyed, the experience of particular companies can vary. For the auto company depicted above, relative stability in the amount expensed for pensions over the 10-year business cycle is in sharp contrast to the volatile profit cycle.

Exhibit 3. **Pension Expense as a Percentage of** **Pretax Profits, 1983 and 1982**

By Fortune 500 Ranks	Number Of Companies	Pension Expense As A Percentage Of Pretax Profits		Comparison To Previous Year			0-9.9%	
		(Composite)		Increased 1983	Decreased 1983	No Change 1983	1983	1982
		1983	1982					
Fortune 1-100	97	11.5%	13.5%	31 (32%)	57 (59%)	3 (3%)	40 (41%)	40 (41%)
Fortune 101-200	98	11.9%	13.3%	20 (20%)	59 (60%)	3 (3%)	35 (36%)	31 (32%)
Fortune 201-300	82	11.9%	12.2%	34 (41%)	40 (49%)	0 (0%)	28 (34%)	24 (29%)
Fortune 301-400	86	13.1%	15.2%	25 (29%)	52 (60%)	2 (2%)	34 (40%)	26 (30%)
Fortune 401-500	81	10.4%	11.7%	18 (22%)	52 (64%)	6 (7%)	42 (52%)	35 (43%)
Total	444	11.6%	13.4%	128 (29%)	260 (59%)	14 (3%)	179 (40%)	156 (35%)
By Industry Group								
Aerospace	16	25.6%	31.5%	2 (13%)	13 (81%)	0 (0%)	1 (6%)	1 (6%)
Apparel	11	8.1%	11.7%	1 (9%)	10 (91%)	0 (0%)	7 (64%)	3 (27%)
Beverages	9	6.6%	6.7%	3 (33%)	5 (56%)	1 (11%)	6 (67%)	6 (67%)
Chemicals	35	15.8%	17.5%	10 (29%)	23 (66%)	1 (3%)	9 (26%)	8 (23%)
Electronics, Appliances	44	18.3%	18.1%	16 (36%)	24 (55%)	0 (0%)	16 (36%)	15 (34%)
Food	44	8.6%	10.1%	14 (32%)	28 (64%)	1 (2%)	24 (55%)	21 (48%)
Furniture	1	2.5%	0.0%	1 (100%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)
Glass, Concrete, Abrasives, Gypsum	14	21.9%	42.2%	3 (21%)	11 (79%)	0 (0%)	1 (7%)	0 (0%)
Industrial and Farm Equipment	35	20.2%	19.2%	8 (23%)	16 (46%)	0 (0%)	9 (26%)	6 (17%)
Leather	1	109.3%	39.4%	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measuring, Scient., Photo. Equip.	16	13.6%	11.7%	8 (50%)	7 (44%)	1 (6%)	4 (25%)	6 (38%)
Metal Manufacturing	23	64.5%	41.6%	7 (30%)	4 (17%)	1 (4%)	4 (17%)	3 (13%)
Metal Products	18	17.8%	15.3%	9 (50%)	8 (44%)	0 (0%)	6 (33%)	5 (28%)
Mining, Crude Oil Production	10	3.3%	3.8%	4 (40%)	4 (40%)	0 (0%)	7 (70%)	6 (60%)
Motor Vehicles	15	22.7%	74.1%	2 (13%)	11 (73%)	0 (0%)	1 (7%)	1 (7%)
Musical Instr., Toys, Sporting Goods	5	11.3%	8.1%	1 (20%)	2 (40%)	1 (20%)	2 (40%)	3 (60%)
Office Equipment (incl. computers)	13	11.5%	13.6%	6 (46%)	7 (54%)	0 (0%)	3 (23%)	2 (15%)
Paper, Fiber, and Wood Products	26	14.3%	18.8%	6 (23%)	17 (65%)	1 (4%)	5 (19%)	2 (8%)
Petroleum Refining	33	4.7%	6.0%	12 (36%)	17 (52%)	0 (0%)	24 (73%)	24 (73%)
Pharmaceuticals	20	5.4%	6.1%	4 (20%)	11 (55%)	5 (25%)	18 (90%)	18 (90%)
Publishing, Printing	17	7.2%	8.9%	2 (12%)	14 (82%)	1 (6%)	15 (88%)	11 (65%)
Rubber, Plastic Products	11	20.7%	28.1%	1 (9%)	9 (82%)	1 (9%)	3 (27%)	2 (18%)
Shipbuilding, Railroad, Trans. Equip.	7	17.8%	16.9%	1 (14%)	5 (71%)	0 (0%)	1 (14%)	1 (14%)
Soaps, Cosmetics	7	9.2%	8.7%	3 (43%)	4 (57%)	0 (0%)	4 (57%)	5 (71%)
Textiles, Vinyl Flooring	10	11.1%	19.3%	3 (30%)	7 (70%)	0 (0%)	5 (50%)	4 (40%)
Tobacco	3	6.4%	7.0%	0 (0%)	3 (100%)	0 (0%)	3 (100%)	3 (100%)
By Fortune 50 Non-Industrial Groups								
Commercial Banking	47	5.3%	6.9%	9 (19%)	32 (68%)	2 (4%)	38 (81%)	32 (68%)
Retailing	40	11.8%	15.7%	8 (20%)	29 (73%)	2 (5%)	24 (60%)	20 (50%)
Transportation	43	16.5%	21.6%	8 (19%)	22 (51%)	3 (7%)	12 (28%)	10 (23%)
Utilities	50	11.3%	14.0%	9 (18%)	37 (74%)	4 (8%)	44 (88%)	40 (80%)
Total	180	11.1%	14.0%	34 (19%)	120 (67%)	11 (6%)	118 (66%)	102 (57%)
Industry & Non-Industry Total	624	11.5%	13.6%	162 (26%)	380 (61%)	25 (4%)	297 (48%)	258 (41%)

Detailed Distribution Of Expense/Profit Ratio

Companies With Pretax Loss

10-19.9%		20-29.9%		30-39.9%		40-49.9%		At Least 50%		1983	1982
1983	1982	1983	1982	1983	1982	1983	1982	1983	1982	1983	1982
26 (27%)	22 (23%)	17 (18%)	12 (12%)	2 (2%)	7 (7%)	2 (2%)	4 (4%)	4 (4%)	8 (8%)	6 (6%)	4 (4%)
25 (26%)	21 (21%)	11 (11%)	9 (9%)	5 (5%)	9 (9%)	3 (3%)	3 (3%)	3 (3%)	8 (8%)	16 (16%)	17 (17%)
28 (34%)	27 (33%)	8 (10%)	8 (10%)	4 (5%)	3 (4%)	3 (4%)	2 (2%)	3 (4%)	4 (5%)	8 (10%)	14 (17%)
25 (29%)	26 (30%)	3 (3%)	10 (12%)	9 (10%)	6 (7%)	0 (0%)	3 (3%)	8 (9%)	8 (9%)	7 (8%)	7 (8%)
18 (22%)	23 (28%)	7 (9%)	7 (9%)	3 (4%)	7 (9%)	3 (4%)	0 (0%)	3 (4%)	4 (5%)	5 (6%)	5 (6%)
122 (27%)	119 (27%)	46 (10%)	46 (10%)	23 (5%)	32 (7%)	11 (2%)	12 (3%)	21 (5%)	32 (7%)	42 (9%)	47 (11%)
2 (13%)	0 (0%)	8 (50%)	6 (38%)	3 (19%)	7 (44%)	1 (6%)	1 (6%)	0 (0%)	1 (6%)	1 (6%)	0 (0%)
4 (36%)	6 (55%)	0 (0%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2 (22%)	2 (22%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (11%)	1 (11%)	0 (0%)	0 (0%)
21 (60%)	13 (37%)	2 (6%)	8 (23%)	0 (0%)	3 (9%)	1 (3%)	1 (3%)	1 (3%)	0 (0%)	1 (3%)	2 (6%)
13 (30%)	14 (32%)	6 (14%)	5 (11%)	3 (7%)	3 (7%)	1 (2%)	2 (5%)	1 (2%)	1 (2%)	4 (9%)	4 (9%)
13 (30%)	14 (32%)	2 (5%)	5 (11%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)	3 (7%)	2 (5%)	1 (2%)	1 (2%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)
4 (29%)	0 (0%)	3 (21%)	2 (14%)	2 (14%)	2 (14%)	2 (14%)	2 (14%)	2 (14%)	6 (43%)	0 (0%)	2 (14%)
4 (11%)	13 (37%)	4 (11%)	2 (6%)	3 (9%)	4 (11%)	0 (0%)	2 (6%)	4 (11%)	4 (11%)	11 (31%)	4 (11%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)
7 (44%)	6 (38%)	1 (6%)	2 (13%)	1 (6%)	0 (0%)	2 (13%)	0 (0%)	1 (6%)	1 (6%)	0 (0%)	1 (6%)
3 (13%)	1 (4%)	0 (0%)	0 (0%)	1 (4%)	2 (9%)	1 (4%)	0 (0%)	3 (13%)	2 (9%)	11 (48%)	15 (65%)
6 (33%)	9 (50%)	3 (17%)	2 (11%)	2 (11%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)	2 (11%)
0 (0%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	1 (10%)	2 (20%)	2 (20%)
5 (33%)	4 (27%)	5 (33%)	2 (13%)	1 (7%)	1 (7%)	0 (0%)	0 (0%)	1 (7%)	3 (20%)	2 (13%)	4 (27%)
1 (20%)	2 (40%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (20%)	0 (0%)	1 (20%)	0 (0%)
7 (54%)	6 (46%)	2 (15%)	1 (8%)	1 (8%)	2 (15%)	0 (0%)	1 (8%)	0 (0%)	0 (0%)	0 (0%)	1 (8%)
11 (42%)	11 (42%)	7 (27%)	4 (15%)	1 (4%)	1 (4%)	0 (0%)	0 (0%)	0 (0%)	4 (15%)	2 (8%)	4 (15%)
2 (6%)	6 (18%)	1 (3%)	0 (0%)	1 (3%)	0 (0%)	1 (3%)	1 (3%)	0 (0%)	2 (6%)	4 (12%)	0 (0%)
2 (10%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2 (12%)	5 (29%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)
4 (36%)	1 (9%)	2 (18%)	3 (27%)	0 (0%)	0 (0%)	0 (0%)	1 (9%)	2 (18%)	3 (27%)	0 (0%)	1 (9%)
3 (43%)	1 (14%)	0 (0%)	2 (29%)	2 (29%)	1 (14%)	0 (0%)	0 (0%)	0 (0%)	1 (14%)	1 (14%)	1 (14%)
3 (43%)	2 (29%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
3 (30%)	1 (10%)	0 (0%)	0 (0%)	2 (20%)	4 (40%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)
0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
4 (9%)	13 (28%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	4 (9%)	1 (2%)
8 (20%)	8 (20%)	5 (13%)	6 (15%)	1 (3%)	2 (5%)	1 (3%)	0 (0%)	0 (0%)	1 (3%)	1 (3%)	3 (8%)
6 (14%)	5 (12%)	6 (14%)	5 (12%)	2 (5%)	3 (7%)	2 (5%)	2 (5%)	5 (12%)	10 (23%)	10 (23%)	8 (19%)
5 (10%)	8 (16%)	1 (2%)	2 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
23 (13%)	34 (19%)	12 (7%)	14 (8%)	3 (2%)	5 (3%)	3 (2%)	2 (1%)	6 (3%)	11 (6%)	15 (8%)	12 (7%)
145 (23%)	153 (25%)	58 (9%)	60 (10%)	26 (4%)	37 (6%)	14 (2%)	14 (2%)	27 (4%)	43 (7%)	57 (9%)	59 (9%)

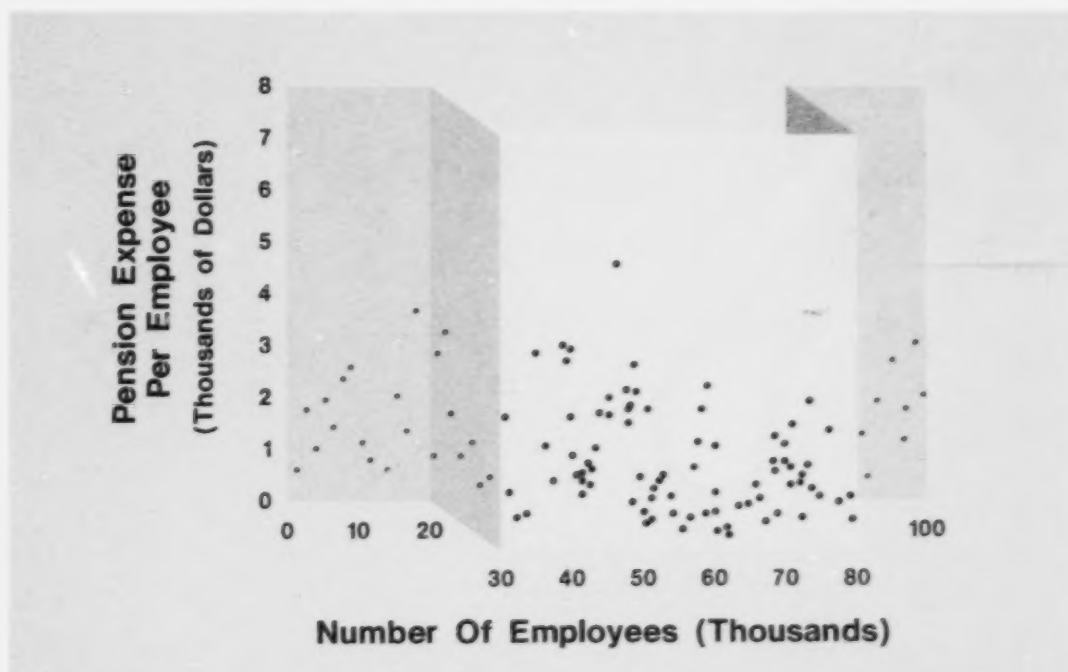
4. Change in Pension Expense per Employee, 1983 from 1982

Exhibit 4 compares pension expense to the size of the work force. Not every employee is necessarily a plan participant, so average pension expense per employee is slightly less than the average expense per participant.

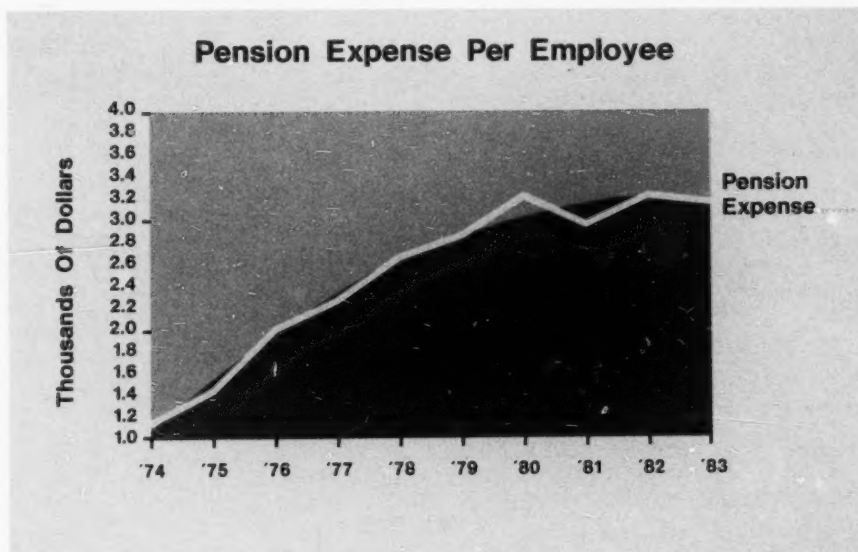
On an aggregate basis, the average expense reported for fiscal 1983 is \$1,388 per employee — 5.8% less than in fiscal 1982. Employment levels in the survey group did not

change significantly from 1982 to 1983, pointing to influences other than work force, as described in Exhibit 2.

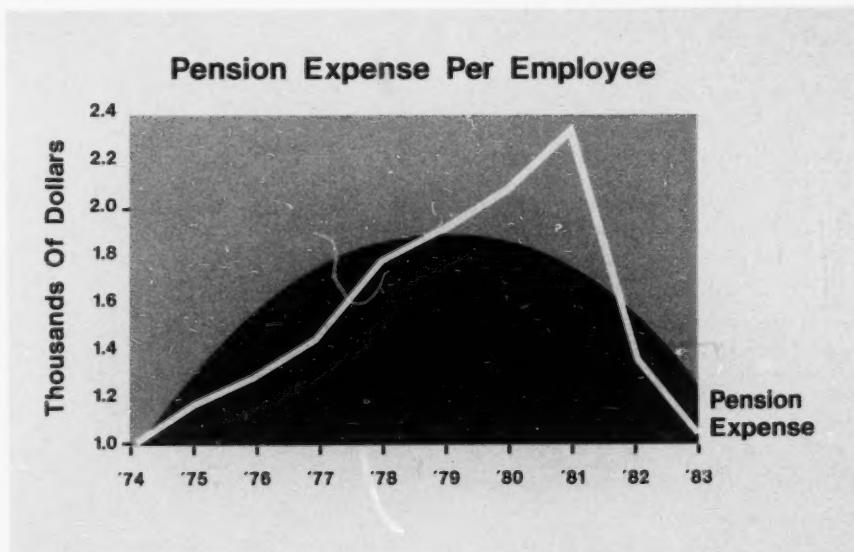
In the utilities group, the expense reflects the dominance of AT&T. Without AT&T, the average utilities group expense per employee would have been \$2,288, a 6.8% increase over 1982.



Do companies with a large number of employees incur lower per capita pension expense? While our survey does not reveal any ironclad relationship, the concentration of companies in the 30,000 to 80,000 employee range does appear to show lower expense per employee in this size group.



Per capita pension expense climbed steadily over the past decade for this office equipment company. The pattern is typical of conventional population/salary factors.



Note the sharp decline in pension expense per employee for this photographic equipment company. Recessionary reduction in work force is typical of the industry. Per capita expense should soon level out or begin to increase again.

Exhibit 4.

Change in Pension Expense per Employee, 1983 from 1982

		Average Expense Per Employee		Change From Previous Year
		(In Dollars)		
By Fortune 500 Ranks	Number Of Companies	1983	1982	(Composite)
Fortune 1-100	97	\$1,700	\$1,728	- 1.6%
Fortune 101-200	96	1,158	1,250	- 7.4%
Fortune 201-300	82	939	944	- 0.5%
Fortune 301-400	85	962	1,075	- 10.5%
Fortune 401-500	81	787	822	- 4.3%
Total	441	\$1,439	\$1,481	- 2.8%
By Industry Group				
Aerospace	16	\$1,869	\$1,898	- 1.5%
Apparel	11	396	398	- 0.5%
Beverages	9	690	673	2.5%
Chemicals	35	1,825	1,811	0.8%
Electronics, Appliances	44	1,073	1,118	- 4.0%
Food	43	681	699	- 2.6%
Furniture	1	48	94	- 48.9%
Glass, Concrete, Abrasives, Gypsum	14	1,390	1,509	- 7.9%
Industrial and Farm Equipment	35	1,367	1,483	- 7.8%
Leather	1	353	327	7.9%
Measuring, Scientific, Photographic Equipment	16	1,147	1,138	0.8%
Metal Manufacturing	23	2,847	3,384	- 15.9%
Metal Products	18	1,193	1,231	- 3.1%
Mining, Crude Oil Production	10	1,562	1,394	12.0%
Motor Vehicles	15	2,128	2,142	- 0.7%
Musical Instruments, Toys, Sporting Goods	5	352	394	- 10.7%
Office Equipment (including computers)	13	1,813	1,843	- 1.6%
Paper, Fiber, and Wood Products	26	1,342	1,143	- 8.8%
Petroleum Refining	33	2,269	2,251	0.8%
Pharmaceuticals	20	849	851	- 0.2%
Publishing, Printing	17	1,042	1,039	0.3%
Rubber, Plastic Products	10	1,051	1,124	- 6.5%
Shipbuilding, Railroad, Transportation Equipment	6	1,329	1,267	4.9%
Soaps, Cosmetics	7	916	893	2.6%
Textiles, Vinyl Flooring	10	373	420	- 11.2%
Tobacco	3	1,081	1,126	- 4.0%
By Fortune 50 Non-Industrial Groups				
Commercial Banking	47	\$ 862	\$ 944	- 8.7%
Retailing	40	456	473	- 3.6%
Transportation	41	1,948	1,817	7.2%
Utilities	50	2,528	3,255	- 22.3%
Total	178	\$1,278	\$1,458	- 12.3%
Industry & Non-Industry Total	619	\$1,388	\$1,474	- 5.8%

Detailed Distribution Of Expense/Employee Ratio

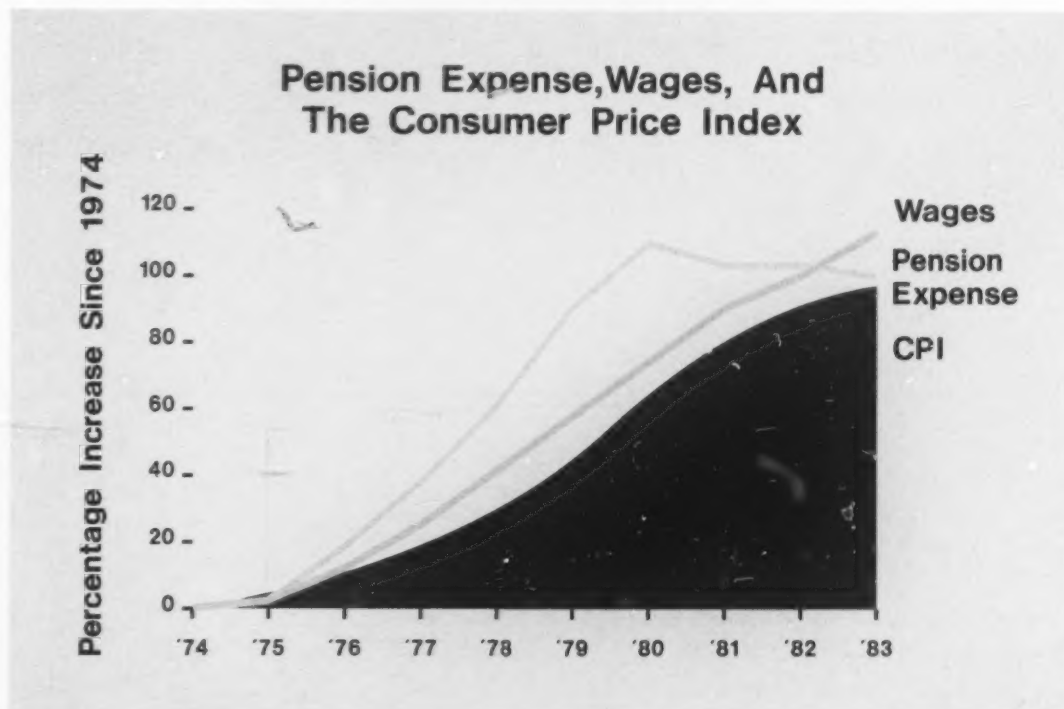
Decrease	Increase Of 0-9.9%	Increase Of 10-19.9%	Increase Of 20-29.9%	Increase Of 30-39.9%	Increase Of 40-49.9%	Increase Of 50% Or More
52 (54%)	22 (23%)	11 (11%)	7 (7%)	3 (3%)	1 (1%)	1 (1%)
68 (71%)	16 (17%)	3 (3%)	4 (4%)	3 (3%)	1 (1%)	1 (1%)
49 (60%)	19 (23%)	6 (7%)	2 (2%)	1 (1%)	1 (1%)	4 (5%)
50 (59%)	17 (20%)	6 (7%)	6 (7%)	4 (5%)	1 (1%)	1 (1%)
41 (51%)	16 (20%)	12 (15%)	4 (5%)	1 (1%)	2 (2%)	5 (6%)
260 (59%)	90 (20%)	38 (9%)	23 (5%)	12 (3%)	6 (1%)	12 (3%)
8 (50%)	4 (25%)	3 (19%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)
4 (36%)	3 (27%)	2 (18%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)
6 (67%)	1 (11%)	1 (11%)	0 (0%)	1 (11%)	0 (0%)	0 (0%)
18 (51%)	10 (29%)	3 (9%)	2 (6%)	0 (0%)	1 (3%)	1 (3%)
28 (64%)	8 (18%)	3 (7%)	2 (5%)	1 (2%)	0 (0%)	2 (5%)
20 (47%)	12 (28%)	2 (5%)	4 (9%)	2 (5%)	0 (0%)	3 (7%)
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
11 (79%)	1 (7%)	2 (14%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
28 (80%)	1 (3%)	3 (9%)	1 (3%)	1 (3%)	1 (3%)	0 (0%)
0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
7 (44%)	3 (19%)	3 (19%)	0 (0%)	1 (6%)	0 (0%)	2 (13%)
18 (78%)	4 (17%)	1 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
13 (72%)	3 (17%)	0 (0%)	1 (6%)	0 (0%)	1 (6%)	0 (0%)
5 (50%)	1 (10%)	1 (10%)	1 (10%)	2 (20%)	0 (0%)	0 (0%)
9 (60%)	5 (33%)	0 (0%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)
3 (60%)	1 (20%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
8 (62%)	2 (15%)	0 (0%)	1 (8%)	1 (8%)	1 (8%)	0 (0%)
18 (69%)	5 (19%)	1 (4%)	2 (8%)	0 (0%)	0 (0%)	0 (0%)
20 (61%)	5 (15%)	3 (9%)	2 (6%)	1 (3%)	0 (0%)	2 (6%)
8 (40%)	5 (25%)	5 (25%)	0 (0%)	0 (0%)	1 (5%)	1 (5%)
6 (35%)	6 (35%)	2 (12%)	2 (12%)	0 (0%)	0 (0%)	1 (6%)
5 (50%)	4 (40%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
1 (14%)	4 (57%)	0 (0%)	0 (0%)	1 (14%)	1 (14%)	0 (0%)
7 (70%)	1 (10%)	0 (0%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)
2 (67%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
23 (49%)	14 (30%)	5 (11%)	3 (6%)	2 (4%)	0 (0%)	0 (0%)
22 (55%)	7 (18%)	6 (15%)	2 (5%)	1 (3%)	0 (0%)	2 (5%)
19 (46%)	8 (20%)	7 (17%)	4 (10%)	1 (2%)	0 (0%)	2 (5%)
11 (22%)	18 (36%)	15 (30%)	2 (4%)	3 (6%)	0 (0%)	1 (2%)
75 (42%)	47 (26%)	33 (19%)	11 (6%)	7 (4%)	0 (0%)	5 (3%)
335 (54%)	137 (22%)	71 (11%)	34 (6%)	19 (3%)	6 (1%)	17 (3%)

5. Pension Expense as a Percentage of Compensation, 1983 and 1982

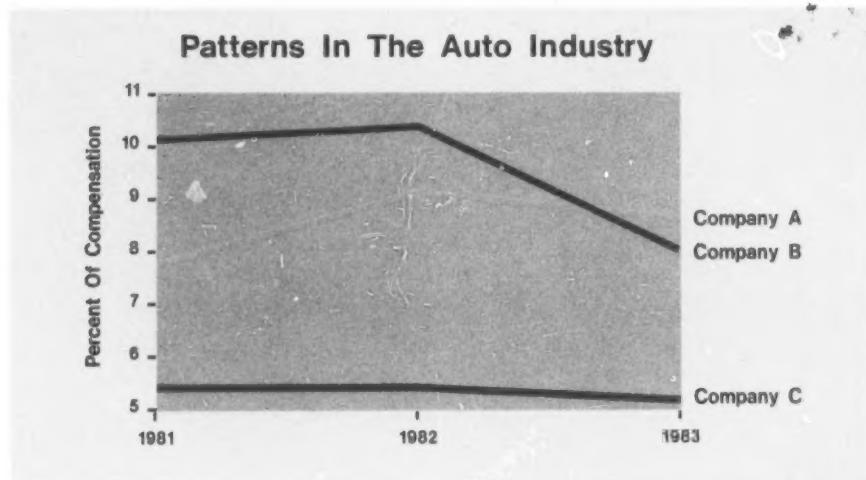
As far as it can be measured, pension expense as a percentage of total compensation remained relatively unchanged from 1982 to 1983. The composite company in our study shows a slight decrease from 6.0% in 1982 to 5.8% in fiscal 1983.

Only about 38% of the survey companies disclosed compensation information. Where representation was too small to be statistically significant, Exhibit 5 does not break out statistics by industry group.

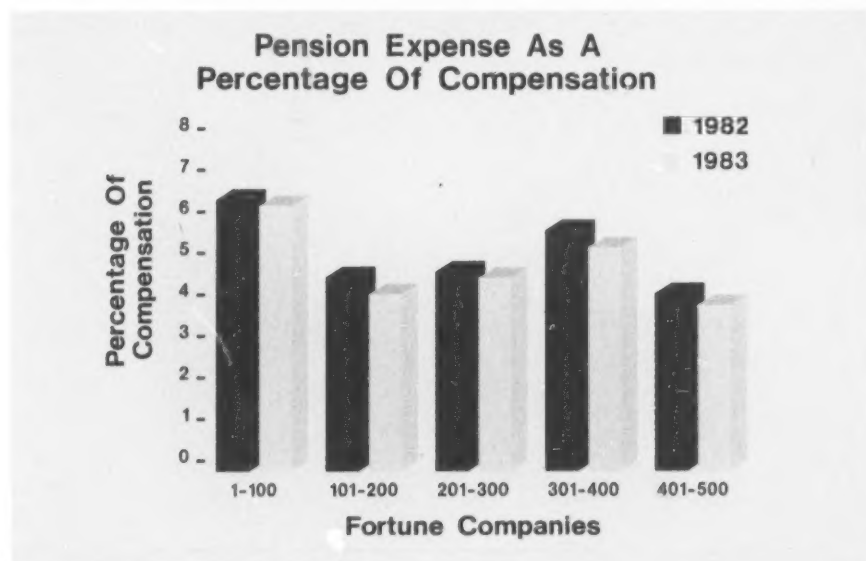
ABOUT DISCREPANCIES: American Telephone and Telegraph did not publish compensation information this year. As a result, the utilities' ratio for 1982, shown in this year's *Executive Report* for comparative purposes, has been cut back to 7.3% (from the 11.3% shown for utilities in last year's report, when AT&T was included).



In the early years post-ERISA, corporate expense for pensions rose at a faster rate than salaries. Both these outpaced the escalation in the Consumer Price Index. Note the reversal in the pension expense pattern since 1980.



Changes in benefit formulas, including freezing of increases (characteristic of collective bargaining concessions), can contribute to a decline in the pension expense/compensation ratio. These 3 auto companies are typical of an industry in which such concessions occurred during the recession.



On the whole, the 500 Industrials report lower pension expense as a percentage of compensation in 1983. The decrease in this ratio from last year is least noticeable in the top 100 companies.

Exhibit 5. **Pension Expense as a Percentage of** **Compensation, 1983 and 1982**

		Comparison To Previous Year					
By Fortune 500 Ranks	Number Of Companies	Pension Expense (\$ Millions)		Compensation (\$ Millions)		Pension Expense As A Percentage Of Compensation (Composite)	
		1983	1982	1983	1982	1983	1982
Fortune 1-100	49	\$ 8,789.8	\$ 8,737.1	\$138,111.5	\$131,888.9	6.4%	6.6%
Fortune 101-200	33	1,085.2	1,175.4	25,230.3	25,004.5	4.3%	4.7%
Fortune 201-300	22	420.8	414.5	9,013.3	8,603.5	4.7%	4.8%
Fortune 301-400	20	266.3	293.5	4,888.8	5,054.9	5.4%	5.8%
Fortune 401-500	11	72.3	74.0	1,793.8	1,738.8	4.0%	4.3%
Total	135	\$10,634.4	\$10,694.5	\$179,037.7	\$172,290.6	5.9%	6.2%
By Fortune 50							
Non-Industrial Groups							
Commercial Banking	47	\$ 552.0	\$ 572.6	\$ 16,318.6	\$ 14,476.8	3.4%	4.0%
Transportation	23	1,146.3	1,012.4	20,633.4	19,320.8	5.6%	5.2%
Utilities	33	1,057.5	975.5	14,654.8	13,387.8	7.2%	7.3%
Total	103	\$ 2,755.8	\$ 2,560.5	\$ 51,606.8	\$ 47,185.4	5.3%	5.4%
Industry & Non-Industry							
Total	238	\$13,390.2	\$13,255.0	\$230,644.5	\$219,476.0	5.8%	6.0%

Detailed Distribution Of Expense/Compensation Ratio

Pension Expense Equal To 0-4.9% Of Compensation		Pension Expense Equal To 5-9.9% Of Compensation		Pension Expense Equal To 10-14.9% Of Compensation		Pension Expense Equal To 15-19.9% Of Compensation		Pension Expense Equal To 20% Or More Of Compensation	
1983	1982	1983	1982	1983	1982	1983	1982	1983	1982
21 (43%)	18 (37%)	26 (53%)	28 (57%)	2 (4%)	3 (6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
25 (76%)	22 (67%)	7 (21%)	10 (30%)	1 (3%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
13 (59%)	14 (64%)	9 (41%)	8 (36%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
11 (55%)	10 (50%)	6 (30%)	7 (35%)	1 (5%)	3 (15%)	2 (10%)	0 (0%)	0 (0%)	0 (0%)
<u>7 (64%)</u>	<u>7 (64%)</u>	<u>4 (36%)</u>	<u>4 (36%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>
77 (57%)	71 (53%)	52 (39%)	57 (42%)	4 (3%)	7 (5%)	2 (1%)	0 (0%)	0 (0%)	0 (0%)
42 (89%)	36 (77%)	5 (11%)	11 (23%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
9 (39%)	9 (39%)	13 (57%)	13 (57%)	1 (4%)	1 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<u>8 (24%)</u>	<u>10 (30%)</u>	<u>23 (70%)</u>	<u>22 (67%)</u>	<u>2 (6%)</u>	<u>1 (3%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>
<u>59 (57%)</u>	<u>55 (53%)</u>	<u>41 (40%)</u>	<u>46 (45%)</u>	<u>3 (3%)</u>	<u>2 (2%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>	<u>0 (0%)</u>
136 (57%)	126 (53%)	93 (39%)	103 (43%)	7 (3%)	9 (4%)	2 (1%)	0 (0%)	0 (0%)	0 (0%)

Pension Funding

Over a 10-year span, a small difference in annual rate of return can make a big difference in total investment results. Long term strategic planning is a corporate management tool that pension decision makers are using to capture investment yields, which in turn can help minimize the current cost of funding plans.

Sound actuarial policy supported by skilled forecasting methods is the key to effective assets/liabilities management.

The PENSION FUNDING part of this study examines plan assets in the light of pension obligations. The value of both vested and non-vested benefits is measured against plan assets, and also against the sponsoring corporation's net worth.

Ongoing annual pension plan expense, examined in the earlier Exhibits, is governed by Accounting Principles Board Opinion Number Eight. In the PENSION FUNDING section, Financial Accounting Standards Board (FASB) Statement Number 36 governs. *The interest rates disclosed under FASB Statement Number 36 are not necessarily the same as those used in the calculation of ongoing pension plan expense.*

6. Ratio of Plan Assets to Present Value of Vested Benefits, with Reported Interest Rates, 1983

Fund assets rose dramatically over the 1982 and 1983 fiscal years. This increase is clearly traceable to the rise in the investment value of long-term debt instruments because of declining interest rates and a surging stock market. The average company in our study had plan assets of over \$564 million. Among the Fortune 100 companies, the average plan assets amounted to nearly \$1.8 billion.

This year, 88.6% of the companies in our sample had plan assets in excess of the value of vested benefits. Only 79.8% could claim this

last year. The composite company was 97.7% funded with respect to vested benefits. Last year's comparable ratio was 95.4%.

The average interest rate reported in compliance with the Financial Accounting Standards Board Statement Number 36 (referred to as FASB-36 interest rate throughout this section) continued to climb. The companies in our study disclose an average FASB-36 interest rate of 7.96%. The table below is a 3-year summary:

Funded Status as Reported

	Industrial Companies			Non-Industrial Companies			All Companies		
	1983	1982	1981	1983	1982	1981	1983	1982	1981
Number of Companies	376	402	456	150	148	171	526	550	627
% Funded with Respect to Vested Benefits	97.2%	94.7%	93.9%	99.4%	97.5%	97.5%	97.7%	95.4%	94.7%
Average FASB-36 Interest Rate	8.01%	7.89%	7.58%	7.81%	7.75%	7.44%	7.96%	7.85%	7.54%

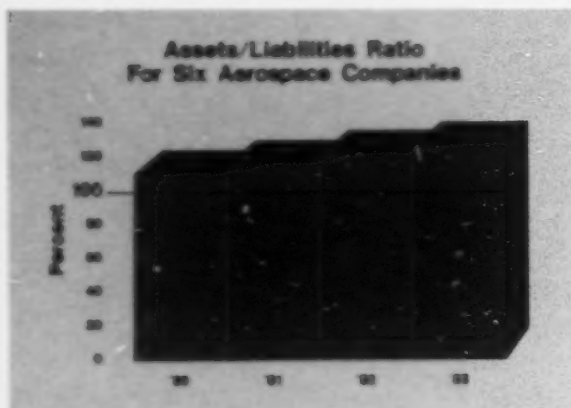
ABOUT METHODOLOGY: As in last year's study, fewer companies reported a discrete FASB-36 interest rate assumption. To maintain the integrity of comparative data from year to year, we confine our analysis to those companies that report a *single* weighted average interest rate assumed in valuing their plans' benefits.

We separate the plans into two groups: *Fully Funded* (value of assets equals or exceeds value of vested benefits) and *Partially Funded* (value of assets is less than value of vested benefits). In both settings, the value of vested

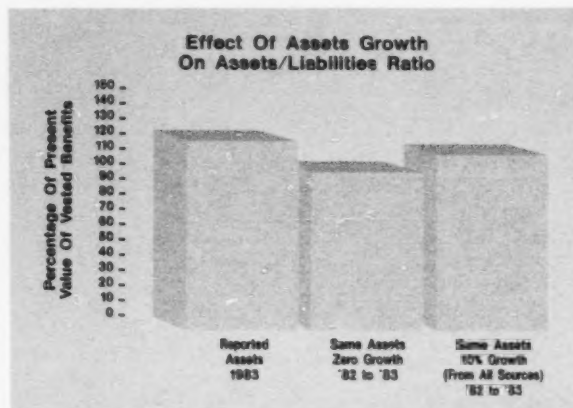
benefits is based on the FASB-36 interest rate assumption reported.

A third setting combines both groups and presents overall averages, along with a composite ratio of assets to benefits. In calculating the composite ratio, we exclude the portion of assets that exceeds 100% of the value of benefits in the *Fully Funded* group. This adjusted ratio gives a fairer measure of aggregate funding status by preventing the distortion otherwise caused by overfunded plans.

This methodology is used in Chapters 6, 7, and 8.

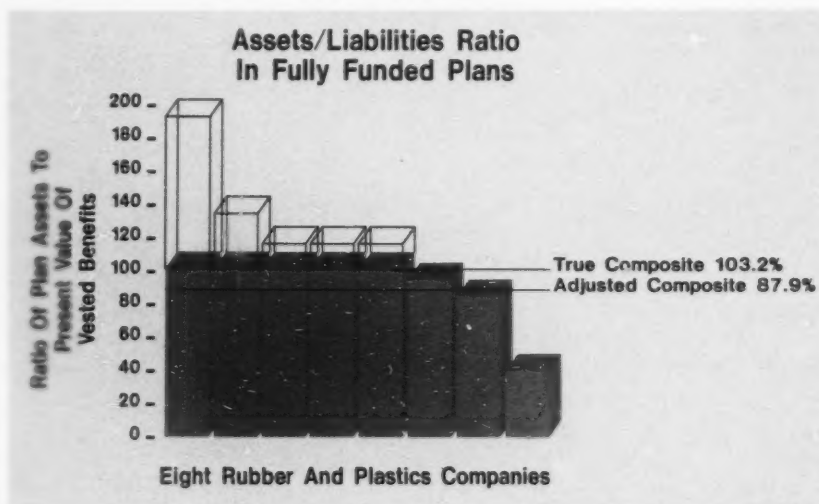


The assets to present value of vested benefits ratio is only one measure of a plan's ability to pay promised benefits. Pension plans in the aerospace industry appear to be exceptionally well funded. Longer range corporate objectives, however, might require this kind of short-term growth.



The pension plans of the Fortune 100 companies would have been less "well funded" if plan assets had not earned such high returns. While earnings are not the only source of growth, the importance of strong assets/liabilities management is apparent.

"In calculating the composite ratio, we exclude the portion of assets that exceeds 100% of the value of benefits in the Fully Funded group. This adjusted ratio gives a fairer measure of aggregate funding status by preventing the distortion otherwise caused by overfunded plans."



The composite plan in the study is funded to 97.7% of the present value of vested benefits. Companies in the rubber and plastics industry (illustrated above) typify the broad range of funding levels reflected in the composite ratio. (Note that funding ratios in excess of 100% are restated as 100% for purposes of arriving at a representative weighted composite.)

Exhibit 6.

Ratio of Plan Assets to Present Value of Vested Benefits, with Reported Interest Rates, 1983

Companies Having Plan Assets Equal To 100% Or More Of Present Value Of Vested Benefits					
	Number Of Companies	Vested Benefits (\$ Millions)	Plan Assets (\$ Millions)	Interest Rate Assumption (Average)	Plan Assets To PVVB (Composite)
By Fortune 500 Ranks					
Fortune 1-100	74	\$ 89,090.0	\$118,508.5	8.09%	133.0%
Fortune 101-200	74	21,315.0	28,574.3	8.29%	134.1%
Fortune 201-300	58	7,155.4	9,790.2	8.11%	136.8%
Fortune 301-400	62	3,865.7	5,463.5	7.83%	141.3%
Fortune 401-500	61	2,817.6	3,816.6	7.50%	135.5%
Total	329	\$124,243.7	\$166,153.1	7.98%	133.7%
By Industry Group					
Aerospace	12	\$ 14,326.2	\$ 19,704.1	7.65%	137.5%
Apparel	10	726.0	948.3	7.56%	130.6%
Beverages	7	832.8	1,310.1	8.21%	157.3%
Chemicals	28	12,869.4	18,764.7	8.13%	145.8%
Electronics, Appliances	27	13,593.5	17,513.6	7.71%	128.8%
Food	30	4,032.9	5,749.1	8.13%	142.6%
Furniture	1	38.4	72.0	9.25%	187.5%
Glass, Concrete, Abrasives, Gypsum	10	2,453.3	3,101.6	8.57%	126.4%
Industrial and Farm Equipment	28	7,327.4	9,160.7	8.06%	125.0%
Leather	0	0.0	0.0	0.00%	0.0%
Measuring, Scientific, Photographic Equipment	13	4,782.6	6,784.2	7.85%	141.9%
Metal Manufacturing	13	4,567.9	5,424.3	8.19%	118.7%
Metal Products	15	2,939.2	3,378.8	8.16%	115.0%
Mining, Crude Oil Production	7	648.1	995.8	8.14%	153.7%
Motor Vehicles	8	9,219.7	10,522.0	7.96%	114.1%
Musical Instruments, Toys, Sporting Goods	2	226.9	350.4	8.00%	154.4%
Office Equipment (including computers)	12	10,769.8	15,570.7	7.54%	144.6%
Paper, Fiber, and Wood Products	24	5,357.6	6,858.6	8.29%	128.0%
Petroleum Refining	26	19,523.8	25,578.5	7.85%	131.0%
Pharmaceuticals	18	3,078.0	4,582.0	7.87%	148.9%
Publishing, Printing	14	1,225.1	1,953.1	7.62%	159.4%
Rubber, Plastic Products	5	2,528.0	3,120.8	8.28%	123.5%
Shipbuilding, Railroad, Transportation Equipment	2	578.5	817.8	7.25%	141.4%
Soaps, Cosmetics	7	792.4	1,207.2	7.66%	152.4%
Textiles, Vinyl Flooring	8	673.3	1,017.9	8.25%	151.2%
Tobacco	2	1,133.9	1,667.8	7.75%	147.1%
By Fortune 50 Non-Industrial Groups					
Commercial Banking	38	\$ 4,066.3	\$ 7,002.4	8.04%	172.2%
Retailing	31	5,141.0	7,597.6	7.80%	147.8%
Transportation	22	2,784.1	4,327.9	7.71%	155.5%
Utilities	46	40,688.8	68,117.5	7.64%	167.4%
Total	137	\$ 52,680.2	\$ 87,045.4	7.80%	165.2%
Industry & Non-Industry Total	466	\$176,923.9	\$253,198.5	7.93%	143.1%

**Companies Having Plan Assets Equal To Less Than 100% Of
Present Value Of Vested Benefits**

Number Of Companies	Vested Benefits (\$ Millions)	Plan Assets (\$ Millions)	Interest Rate Assumption (Average)	Plan Assets To PVVB (Composite)
9	\$31,474.3	\$29,452.6	8.97%	93.6%
13	8,856.9	6,966.0	8.32%	78.7%
10	2,233.5	1,745.6	8.13%	78.2%
8	1,272.5	950.3	7.88%	74.7%
7	253.9	207.0	7.86%	81.5%
47	\$44,091.1	\$39,321.5	8.26%	89.2%
0	\$ 0.0	\$ 0.0	0.00%	0.0%
0	0.0	0.0	0.00%	0.0%
0	0.0	0.0	0.00%	0.0%
2	261.9	228.3	7.00%	87.2%
3	362.8	281.7	7.67%	77.7%
6	1,272.1	1,193.7	7.98%	93.8%
0	0.0	0.0	0.00%	0.0%
1	335.4	321.3	9.50%	95.8%
3	1,109.1	818.7	8.17%	73.8%
1	80.3	63.8	8.00%	79.5%
1	67.4	55.7	6.50%	82.6%
10	10,850.0	9,334.7	9.31%	86.0%
2	171.4	129.7	8.50%	75.7%
0	0.0	0.0	0.00%	0.0%
4	23,939.6	21,914.0	8.19%	91.5%
2	8.0	7.1	7.50%	88.8%
0	0.0	0.0	0.00%	0.0%
2	294.3	257.3	7.75%	87.4%
0	0.0	0.0	0.00%	0.0%
1	475.1	470.3	7.00%	99.0%
0	0.0	0.0	0.00%	0.0%
3	1,351.3	881.0	9.30%	65.2%
3	3,017.6	2,905.4	7.67%	96.3%
0	0.0	0.0	0.00%	0.0%
2	76.7	49.6	7.50%	64.7%
1	418.1	409.1	8.50%	97.9%
0	\$ 0.0	\$ 0.0	0.00%	0.0%
3	290.7	280.7	7.83%	96.6%
7	3,612.8	3,345.1	8.14%	92.6%
3	636.1	591.6	7.33%	93.0%
13	\$ 4,539.6	\$ 4,217.4	7.88%	92.9%
60	\$48,630.7	\$43,538.9	8.18%	89.5%

Combined Figures — All Companies

Number Of Companies	Interest Rate Assumption (Average)	Plan Assets To PVVB (Adjusted Composite)	Average Plan Assets Per Company (\$ Millions)
83	8.18%	98.3%	\$1,782.7
87	8.29%	93.7%	408.5
68	8.11%	94.8%	169.6
70	7.84%	93.7%	91.6
68	7.54%	98.5%	59.2
376	8.01%	97.2%	\$ 546.5
12	7.65%	100.0%	\$1,642.0
10	7.56%	100.0%	94.8
7	8.21%	100.0%	187.2
30	8.05%	99.7%	633.1
30	7.71%	99.4%	593.2
36	8.11%	98.5%	192.9
1	9.25%	100.0%	72.0
11	8.65%	99.5%	311.2
31	8.07%	96.6%	321.9
1	8.00%	79.5%	83.8
14	7.76%	99.8%	488.6
23	8.67%	90.2%	641.7
17	8.20%	98.7%	206.4
7	8.14%	100.0%	142.3
12	8.04%	93.9%	2,703.0
4	7.75%	99.6%	89.4
12	7.54%	100.0%	1,297.6
26	8.25%	99.3%	273.7
26	7.85%	100.0%	983.8
19	7.83%	99.9%	265.9
14	7.62%	100.0%	139.5
8	8.66%	87.9%	500.2
5	7.50%	96.9%	744.6
7	7.66%	100.0%	172.5
10	8.10%	96.4%	106.7
3	8.00%	99.4%	692.3
38	8.04%	100.0%	\$ 184.3
34	7.80%	99.8%	231.7
29	7.82%	95.8%	264.6
49	7.62%	99.9%	1,402.2
150	7.81%	99.4%	\$ 608.4
526	7.96%	97.7%	\$ 564.1

7. Ratio of Plan Assets to Present Value of Total Accumulated Benefits, with Reported Interest Rates, 1983

Four out of every five companies in our study have fully funded their total accumulated benefits. The composite funded ratio is 95.3%, compared to 92.5% last year.

Across the survey group, non-vested accumulated benefits represent no more than 10% of

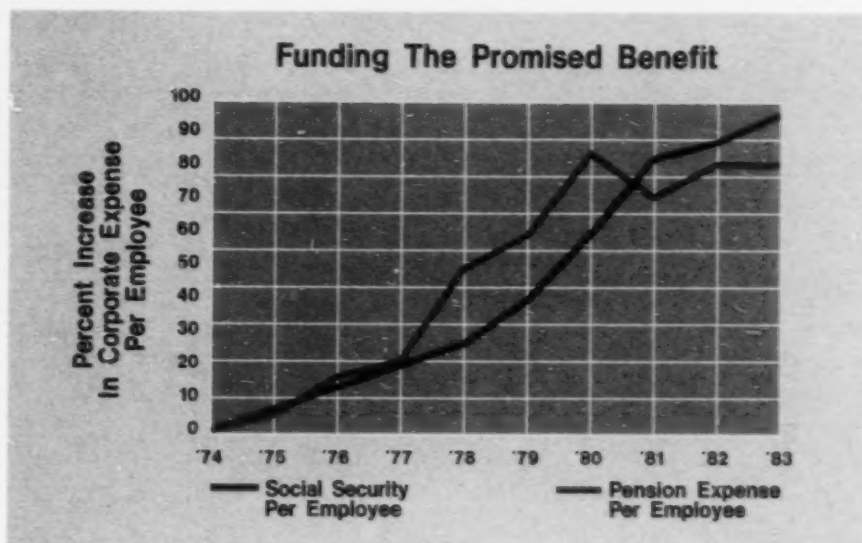
aggregate pension liabilities. Plans are sufficiently funded to pay 95.3% of all present liabilities if these non-vested benefits are included.

The table below is a 3-year summary of these plans' funded status:

Funded Status as Reported

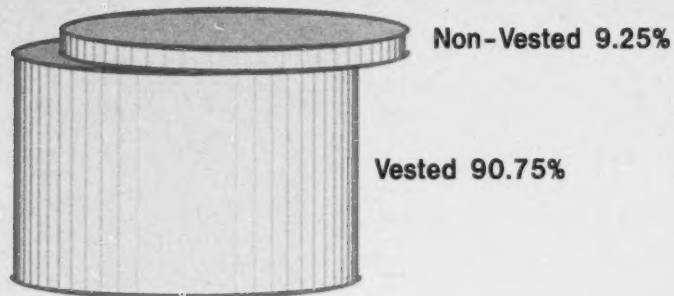
	Industrial Companies			Non-Industrial Companies			All Companies		
	1983	1982	1981	1983	1982	1981	1983	1982	1981
Number of Companies	376	402	456	150	147	171	526	550	627
% Funded with Respect to Total Accumulated Benefits	94.0%	91.1%	89.4%	99.1%	97.2%	96.4%	95.3%	92.5%	91.0%
Average FASB-36 Interest Rate	8.01%	7.89%	7.58%	7.81%	7.76%	7.44%	7.96%	7.86%	7.54%

The methodology described in Chapter 6 was applied here.



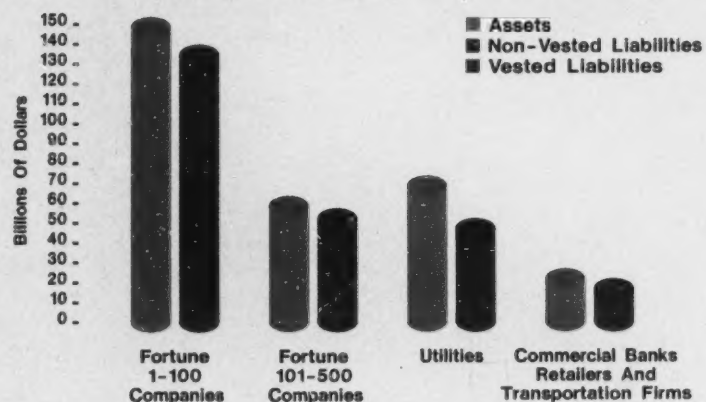
Four out of five plans are in a position to pay all accumulated benefits. In maintaining this capability, companies report 80% more pension expense per employee than in 1974. The same companies also pay almost 100% more for employee Social Security benefits than in 1974.

Total Accumulated Benefits



Non-vested accumulated benefits represent less than 10% of total pension liabilities. The composite plan in this study is able to pay for 95.3% of all benefit liabilities, including non-vested benefits.

Distribution of Present Value Of Total Accumulated Benefits & Plan Assets



The majority of companies report plan assets well in excess of present liabilities. 78% of the Fortune 500 companies and more than 90% of the utilities have plans that are 100% funded, or better, with respect to both vested and un-vested benefits.

Exhibit 7.

Ratio of Plan Assets to Present Value of Total Accumulated Benefits, with Reported Interest Rates, 1983

		Companies Having Plan Assets Equal To 100% Or More Of Present Value Of Total Accumulated Benefits				
		Number Of Companies	Total Accumulated Benefits (\$ Millions)	Total Plan Assets (\$ Millions)	Interest Rate Assumption (Average)	Plan Assets To PVAB (Composite)
By Fortune 500 Ranks						
Fortune 1-100		68	\$ 81,230.3	\$103,749.6	8.09%	127.7%
Fortune 101-200		67	19,779.1	25,337.0	8.23%	128.1%
Fortune 201-300		52	6,917.0	8,956.2	8.21%	129.5%
Fortune 301-400		54	3,491.7	4,719.1	7.84%	135.2%
Fortune 401-500		53	2,438.0	3,166.0	7.55%	129.9%
Total		294	\$113,856.1	\$145,927.9	8.00%	128.2%
By Industry Group						
Aerospace		11	\$ 15,632.8	\$ 19,460.7	7.57%	124.5%
Apparel		8	596.8	762.7	7.50%	127.8%
Beverages		7	971.9	1,310.1	8.21%	134.8%
Chemicals		26	12,340.3	17,413.8	8.15%	141.1%
Electronics, Appliances		24	14,305.0	17,138.5	7.74%	119.8%
Food		27	4,053.7	5,457.5	8.02%	134.6%
Furniture		1	40.2	72.0	9.25%	79.1%
Glass, Concrete, Abrasives, Gypsum		8	2,146.1	2,586.9	8.66%	120.5%
Industrial and Farm Equipment		23	5,165.1	6,357.2	8.13%	123.1%
Leather		0	0.0	0.0	0.00%	0.0%
Measuring, Scientific, Photographic Equipment		11	4,958.0	6,639.3	8.01%	133.9%
Metal Manufacturing		9	2,248.7	2,752.9	8.30%	122.4%
Metal Products		12	1,006.9	1,250.9	8.20%	124.2%
Mining, Crude Oil Production		7	717.2	995.8	8.14%	138.8%
Motor Vehicles		5	1,397.5	1,812.6	7.72%	129.7%
Musical Instruments, Toys, Sporting Goods		2	245.0	350.4	8.00%	143.0%
Office Equipment (including computers)		11	11,517.0	15,557.0	7.72%	135.1%
Paper, Fiber, and Wood Products		22	5,568.3	6,718.3	8.43%	120.7%
Petroleum Refining		25	20,664.5	25,548.6	7.88%	123.6%
Pharmaceuticals		17	2,670.2	3,959.2	7.84%	148.3%
Publishing, Printing		14	1,301.3	1,953.1	7.62%	150.1%
Rubber, Plastic Products		5	2,717.5	3,120.8	8.28%	114.8%
Shipbuilding, Railroad, Transportation Equipment		2	621.7	817.8	7.25%	131.5%
Soaps, Cosmetics		7	893.1	1,207.2	7.66%	135.2%
Textiles, Vinyl Flooring		8	739.9	1,017.9	8.25%	137.6%
Tobacco		2	1,338.2	1,667.8	7.75%	124.6%
By Fortune 50 Non-Industrial Groups						
Commercial Banking		37	\$ 4,515.5	\$ 6,986.6	8.07%	154.7%
Retailing		27	5,385.9	7,391.0	7.88%	137.2%
Transportation		21	2,939.2	4,294.3	7.72%	146.1%
Utilities		45	44,939.4	66,906.6	7.65%	148.9%
Total		130	\$ 57,780.0	\$ 85,578.5	7.83%	148.1%
Industry & Non-Industry Total		424	\$171,636.1	\$231,506.4	7.95%	134.9%

**Companies Having Plan Assets Less Than 100% Of
Present Value Of Total Accumulated Benefits**

Number Of Companies	Total Accumulated Benefits (\$ Millions)	Total Plan Assets (\$ Millions)	Interest Rate Assumption (Average)	Plan Assets To PVAB (Composite)
15	\$51,413.4	\$44,211.6	8.63%	86.0%
20	12,838.9	10,203.2	8.51%	79.5%
16	3,287.9	2,579.7	7.80%	78.5%
16	2,155.7	1,694.7	7.82%	78.6%
15	936.4	857.6	7.49%	91.6%
82	\$70,632.3	\$59,546.8	8.07%	84.3%
1	\$ 264.4	\$ 243.4	8.50%	92.1%
2	194.2	185.6	7.80%	95.6%
0	0.0	0.0	0.00%	0.0%
4	1,651.7	1,579.2	7.38%	95.6%
6	806.9	656.8	7.58%	81.4%
9	1,680.9	1,485.2	8.37%	88.4%
0	0.0	0.0	0.00%	0.0%
3	895.2	836.0	8.63%	93.4%
8	4,004.6	3,622.3	7.88%	90.5%
1	81.6	63.8	8.00%	78.2%
3	219.4	200.6	6.83%	91.4%
14	14,373.9	12,006.1	8.91%	83.5%
5	2,327.7	2,257.7	8.20%	97.0%
0	0.0	0.0	0.00%	0.0%
7	37,166.8	30,623.4	8.26%	82.4%
2	8.6	7.1	7.50%	83.2%
1	16.0	13.7	5.50%	85.4%
4	463.9	397.7	7.25%	85.7%
1	31.5	29.9	7.00%	94.9%
2	1,177.3	1,093.1	7.75%	92.8%
0	0.0	0.0	0.00%	0.0%
3	1,444.0	881.0	9.30%	61.0%
3	3,294.1	2,905.4	7.67%	88.2%
0	0.0	0.0	0.00%	0.0%
2	82.2	49.6	7.50%	60.3%
1	447.4	409.1	8.50%	91.4%
1	\$ 16.4	\$ 15.8	7.00%	96.8%
7	531.7	487.3	7.50%	91.6%
8	3,810.7	3,378.6	8.06%	88.7%
4	1,926.7	1,802.6	7.25%	93.6%
20	\$ 6,285.5	\$ 5,684.3	7.65%	90.4%
102	\$76,917.8	\$65,231.1	7.99%	84.8%

Combined Figures — All Companies

Number Of Companies	Interest Rate Assumption (Average)	Plan Assets To PVAB (Adjusted Composite)
83	8.18%	94.6%
87	8.29%	91.9%
68	8.11%	93.1%
70	7.84%	91.8%
68	7.54%	97.7%
376	8.01%	94.0%
12	7.65%	99.9%
10	7.56%	98.9%
7	8.21%	100.0%
30	8.05%	99.5%
30	7.71%	99.0%
36	8.11%	96.6%
1	9.25%	100.0%
11	8.65%	98.1%
31	8.07%	95.8%
1	8.00%	78.2%
14	7.76%	99.6%
23	8.67%	85.8%
17	8.20%	97.9%
7	8.14%	100.0%
12	8.04%	83.0%
4	7.75%	99.4%
12	7.54%	100.0%
26	8.25%	98.9%
26	7.85%	100.0%
19	7.83%	97.8%
14	7.62%	100.0%
8	8.66%	86.5%
5	7.50%	90.1%
7	7.66%	100.0%
10	8.10%	96.0%
3	8.00%	97.9%
38	8.04%	100.0%
34	7.80%	99.3%
29	7.82%	93.6%
49	7.62%	99.7%
150	7.81%	99.1%
526	7.96%	95.3%

8. Effect of Interest Rate Assumption on Unfunded Vested Benefits, 1983

Although broad trends can be analyzed by aggregation of many companies, study of trends for a particular company and comparison of individual companies are complicated. Accounting methods and assumptions used by companies in reporting pensions are not uniform. To improve the usefulness of disclosure, the Financial Accounting Standards Board (FASB) is considering standardization of the methods used to determine a plan's reported normal cost and amortization of unfunded amounts attributable to employees' prior service. FASB might also standardize the actuarial assumptions used to value costs and obligations.

Exhibit 8 indicates the level of aggregate unfunded vested benefits under standardized interest assumptions. This analysis must be qualified in two ways:

- (1) The resulting levels of unfunded vested benefits are not necessarily truer values of absolute unfunded amounts. For example, the unfunded amount under a standardized assumption of 7% is 194% larger than the reported unfunded amount, since most firms used assumptions in excess of 7%. This does not mean that plans are worse off than companies are reporting them to be. Rather, this value is useful relative to last year's 7% standardization, which raised the unfunded amounts by 191% over the reported figures.

- (2) Conversions to standardized as-

sumptions suffer from the effects of implicitly stripping plans of the individual characteristics that govern pension economics. The assumptions used by each company for its plan will reflect the plan's assets, employee demographics, and other factors that cannot be carried easily through conversion to standardized assumptions.

The first alternative uniform interest rate we have selected is 7.00%. It serves as a constant benchmark from year to year and represents a conservative assumption. Our second alternative uniform interest rate varies from year to year, based on our estimate of the equivalent uniform interest rate that would have been applied by the Pension Benefit Guaranty Corporation (PBGC) to the typical plan termination. This year's is 8.75% as of December 31, 1983. These rates are subject to monthly revision by the PBGC. The actual rates that apply in a plan termination depend upon the demographic character of the terminated plan.

Even at a conservative interest rate of 7.00%, four out of every five companies would still be fully funded with respect to *vested* benefits. At the higher alternative uniform interest rate assumption of 8.75%, fewer than 1 out of 10 companies would be less than fully funded with respect to the value of vested benefits. The table below illustrates the number of plans that we estimate would be fully funded at each of the alternative interest rates over the 3-year span:

Assumed Interest Rate for Valuation of Vested Benefits

	Industrial Companies			Non-Industrial Companies			All Companies		
	1983	1982	1981	1983	1982	1981	1983	1982	1981
7%	78%	63%	66%	87%	76%	80%	80%	67%	69%
Reported (varies)	88%	78%	71%	91%	85%	81%	89%	80%	74%
8.75%	89%	—	—	95%	—	—	91%	—	—
9.25%	—	88%	—	—	92%	—	—	89%	—
10%	—	—	93%	—	—	96%	—	—	94%

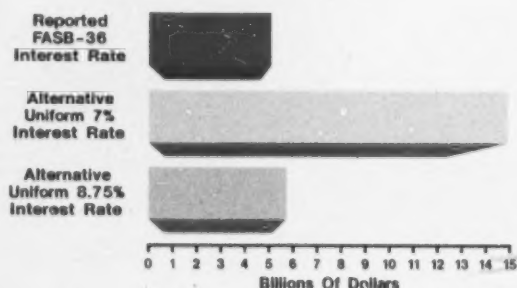
Our estimate of the aggregate value of unfunded vested benefits in the survey group using the PBGC rate exceeds the amounts actually disclosed by the Fortune 500 companies. The discrepancy can be traced to two very large companies that value their plan obligations using an interest rate assumption above 8.75%.

Unfunded Vested Benefits (UVB) By FASB Interest Rate, 1983 and 1982

FASB-36 Interest Rate Assumption	Total Number Of Companies		Number Of Companies With No UVB		Number Of Companies With UVB		Total UVB (\$ Millions)	
	1983	1982	1983	1982	1983	1982	1983	1982
4.50- 4.99	—	—	—	—	—	—	0.0	0.0
5.00- 5.49	2	4	2	3	—	1	0.0	21.1
5.50- 5.99	4	7	4	7	—	—	0.0	0.0
6.00- 6.49	32	46	31	37	1	9	10.2	290.6
6.50- 6.99	20	33	19	28	1	5	11.7	51.5
7.00- 7.49	90	97	78	74	12	23	1352.8	1729.6
7.50- 7.99	63	57	56	42	7	15	160.8	519.6
8.00- 8.49	122	106	105	87	17	19	483.6	647.9
8.50- 8.99	43	31	38	25	5	6	303.1	304.1
9.00- 9.49	73	49	64	37	9	12	1001.9	1061.7
9.50- 9.99	26	15	23	13	3	2	972.4	31.8
10.00-10.99	18	42	14	38	4	4	760.3	3848.9
11.00-11.99	3	5	2	4	1	1	35.0	42.7
12.00-12.99	1	2	1	2	—	—	0.0	0.0
13.00-13.99	—	1	—	1	—	—	0.0	0.0
14.00-14.99	—	2	—	2	—	—	0.0	0.0

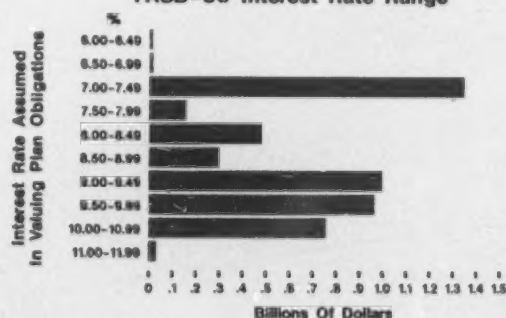
The interest rate assumed in valuing plan liabilities varies from company to company. The aggregate present value of unfunded vested benefits reported by the survey group is shown above with the reported interest rate. The most commonly reported interest assumption is in the 8.0%-8.49% range.

Unfunded Vested Benefits



If all companies had valued plan obligations at a uniform assumed interest rate of 8.75% (approximating the rate applied by the Pension Benefit Guaranty Corporation to plans terminated on December 31, 1983), unfunded vested benefits for the whole survey group would have been slightly higher than the amounts reported.

Distribution Of Reported Unfunded Vested Benefits By FASB-36 Interest Rate Range



The largest amount of unfunded vested benefits in the survey group is in the plans that report a 7.0-7.49% interest rate in valuing plan obligations.

Exhibit 8. **Effect of Interest Rate Assumption on** **Unfunded Vested Benefits, 1983**

By Fortune 500 Ranks	Number Of Companies	Lowest Reported FASB-36 Interest Rate	Highest Reported FASB-36 Interest Rate	Average Reported FASB-36 Interest Rate	Number Of Companies With No UVB Reported	Average FASB-36 Interest Rate If No UVB Reported
Fortune 1-100	83	5.50%	11.90%	8.18%	74	8.09%
Fortune 101-200	87	6.00%	12.40%	8.29%	74	8.29%
Fortune 201-300	68	6.00%	11.25%	8.11%	58	8.11%
Fortune 301-400	70	5.50%	10.50%	7.84%	62	7.83%
Fortune 401-500	68	6.00%	9.60%	7.54%	61	7.50%
Total	376	5.50%	12.40%	8.01%	329	7.98%
By Industry Group						
Aerospace	12	6.00%	8.50%	7.65%	12	7.65%
Apparel	10	6.50%	10.00%	7.56%	10	7.56%
Beverages	7	6.00%	10.50%	8.21%	7	8.21%
Chemicals	30	6.00%	11.00%	8.05%	28	8.13%
Electronics, Appliances	30	6.00%	10.30%	7.71%	27	7.71%
Food	36	5.50%	12.40%	8.11%	30	8.13%
Furniture	1	9.25%	9.25%	9.25%	1	9.25%
Glass, Concrete, Abrasives, Gypsum	11	7.40%	10.00%	8.65%	10	8.57%
Industrial and Farm Equipment	31	6.00%	11.00%	8.07%	28	8.06%
Leather	1	8.00%	8.00%	8.00%	0	0.00%
Measuring, Scientific, Photographic Equipment	14	6.50%	9.00%	7.76%	13	7.85%
Metal Manufacturing	23	6.00%	11.25%	8.67%	13	8.19%
Metal Products	17	6.00%	9.50%	8.20%	15	8.16%
Mining, Crude Oil Production	7	6.00%	11.00%	8.14%	7	8.14%
Motor Vehicles	12	6.50%	9.75%	8.04%	8	7.96%
Musical Instruments, Toys, Sporting Goods	4	7.00%	8.00%	7.75%	2	8.00%
Office Equipment (including computers)	12	5.50%	9.00%	7.54%	12	7.54%
Paper, Fiber, and Wood Products	26	6.00%	10.00%	8.25%	24	8.29%
Petroleum Refining	26	6.00%	10.10%	7.85%	26	7.85%
Pharmaceuticals	19	6.00%	9.25%	7.83%	18	7.87%
Publishing, Printing	14	7.00%	8.50%	7.62%	14	7.62%
Rubber, Plastic Products	8	6.50%	11.90%	8.66%	5	8.28%
Shipbuilding, Railroad, Transportation Equipment	5	6.50%	8.00%	7.50%	2	7.25%
Soaps, Cosmetics	7	6.50%	9.00%	7.66%	7	7.66%
Textiles, Vinyl Flooring	10	7.00%	9.50%	8.10%	8	8.25%
Tobacco	3	7.50%	8.50%	8.00%	2	7.75%
By Fortune 50 Non-Industrial Groups						
Commercial Banking	38	6.50%	10.00%	8.04%	38	8.04%
Retailing	34	6.00%	9.75%	7.80%	31	7.80%
Transportation	29	5.00%	9.50%	7.82%	22	7.71%
Utilities	49	5.00%	11.00%	7.62%	46	7.64%
Total	150	5.00%	11.00%	7.81%	137	7.80%
Industry & Non-Industry Total	526	5.00%	12.40%	7.96%	466	7.93%

Using Reported Interest Rate Assumptions

Reported Basis

Number Of Companies Reporting UVB	Average Reported FASB-35 Interest Rate If UVB Reported	UVB Reported (\$ Millions)
9	8.97%	\$2,021.7
13	8.32%	1,890.9
10	8.13%	487.9
8	7.88%	322.2
7	7.86%	46.9
47	8.26%	\$4,769.6
0	0.00%	\$ 0.0
0	0.00%	0.0
0	0.00%	0.0
2	7.00%	33.7
3	7.67%	81.1
6	7.98%	78.4
0	0.00%	0.0
1	9.50%	14.1
3	8.17%	290.4
1	8.00%	16.5
1	6.50%	11.7
10	9.31%	1,515.3
2	8.50%	41.7
0	0.00%	0.0
4	8.19%	2,025.6
2	7.50%	0.9
0	0.00%	0.0
2	7.75%	37.0
0	0.00%	0.0
1	7.00%	4.8
0	0.00%	0.0
3	9.30%	470.3
3	7.67%	112.2
0	0.00%	0.0
2	7.50%	27.1
1	8.50%	8.9
0	0.00%	\$ 0.0
3	7.83%	10.0
7	8.14%	267.8
3	7.33%	44.5
13	7.88%	\$ 322.3
60	8.18%	\$5,091.9

Using Alternative Uniform Interest Rate Assumptions

Assumed 7% Rate

Number Of Companies Having No UVB	Number Of Companies With UVB	UVB (\$ Millions)
66	17	\$ 8,932.0
63	24	3,710.5
52	16	820.7
56	14	507.2
55	13	86.1
292	84	\$14,056.5
11	1	\$ 12.1
7	3	24.4
7	0	0.0
27	3	91.6
24	6	166.2
24	12	256.9
1	0	0.0
8	3	154.1
23	8	508.9
0	1	24.0
11	3	27.1
10	13	4,624.0
13	4	346.0
7	0	0.0
6	6	6,318.9
2	2	1.2
12	0	0.0
21	5	80.9
26	0	0.0
16	3	81.0
14	0	0.0
4	4	881.5
2	3	358.8
7	0	0.0
7	3	31.1
2	1	68.1
36	2	\$ 5.0
29	5	45.9
21	8	735.9
45	4	102.9
131	19	\$ 889.7
423	103	\$14,946.2

Assumed 8.25% (PBGC) Rate

Number Of Companies Having No UVB	Number Of Companies With UVB	UVB (\$ Millions)
75	8	\$3,168.4
75	12	1,777.6
59	9	396.9
63	7	244.9
64	4	28.0
336	40	\$5,615.8
12	0	\$ 0.0
10	0	0.0
7	0	0.0
30	0	0.0
27	3	42.9
32	4	48.7
1	0	0.0
10	1	34.9
27	4	237.9
0	1	11.6
14	0	0.0
12	11	2,308.2
14	3	64.9
7	0	0.0
8	4	2,261.7
3	1	0.0
12	0	0.0
25	1	15.3
26	0	0.0
19	0	0.0
14	0	0.0
5	3	562.0
4	1	7.9
7	0	0.0
8	2	19.4
2	1	0.3
38	0	\$ 0.0
33	1	5.8
24	5	169.3
48	1	21.2
143	7	\$ 196.3
479	47	\$5,812.1

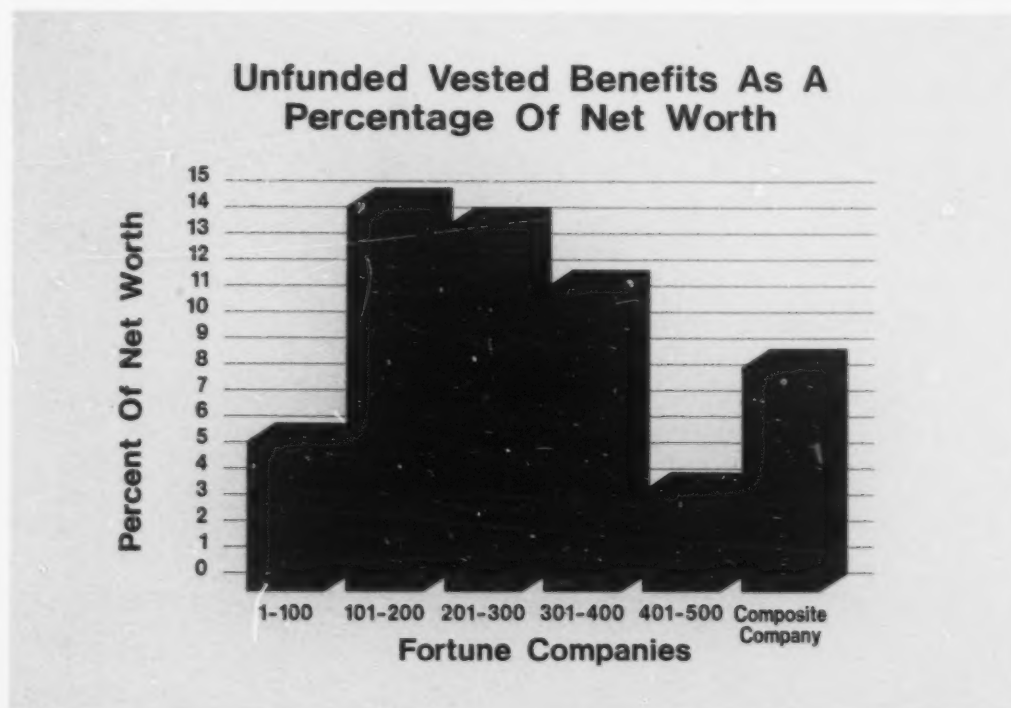
9. Ratio of Unfunded Vested Benefits to Net Worth, 1983

In Exhibit 9, we attempt to establish some measure of the potential strain on the composite company's resources if the company had to fund 100% of the pension plan's total vested benefits today. The exercise is more than theoretical. In the event of an actual plan termination, certain unfunded vested benefits can cause a company to become liable to the Pension Benefit Guaranty Corporation for up to 30% of its net worth.

Only 9 of the 606 companies included in Exhibit 9 had a liability for unfunded vested benefits exceeding 30% of corporate net worth.

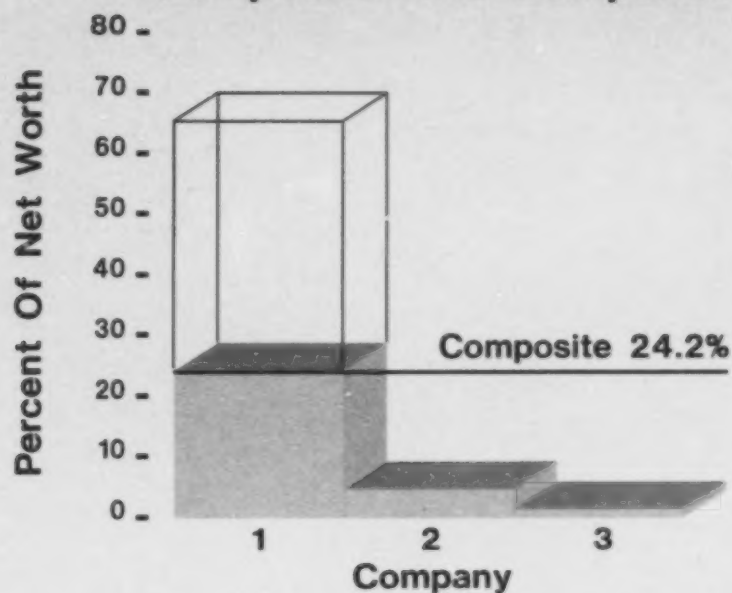
For the composite industrial company, unfunded vested benefits represented only 0.8% of its net worth in 1983 — half of the 1.5% of 1982 net worth shown in last year's study. For the non-industrial companies, the composite company's unfunded vested benefits as a percentage of net worth edged down to 0.3% from last year's 0.4%.

The composite ratio of unfunded vested benefits to net worth for companies not fully funded with respect to vested benefits (66 companies) was less than 8%. Most of the companies with high ratios fell into 2 industries: the metal manufacturing group and the rubber and plastics group.



Few companies report unfunded vested benefits. The present value of the unfunded benefits amounts to less than 8% of the net worth of our composite company. (Only companies reporting unfunded vested benefits are included in the composite.)

Unfunded Vested Benefits Composite And Comparison



Large corporate pension plans as a whole are so well funded that the occasional company reporting unfunded vested benefits recedes into the general statistic. For example: three companies in the rubber and plastics group disclose unfunded vested benefits ranging from a mere 1.8% of net worth to 65.9% of net worth. Viewed on a composite basis, the three companies have \$24.20 of unfunded vested benefits for every \$100 of corporate net worth. Looking behind the weighted average reveals that only one company reports a large unfunded benefit amount. The funding status of all the other companies in this industry is healthy.

Exhibit 9.

Ratio of Unfunded Vested Benefits to Net Worth, 1983

By Fortune 500 Ranks	Number Of Companies	Companies Having No UVB	Detailed Distribution Of Ratio Of Unfunded Vested Benefits To Net Worth	
			UVB Equal To .1 - 9.9% Of Net Worth	UVB Equal To 10 - 19.9% Of Net Worth
Fortune 1-100	93	83 (89%)	6 (6%)	2 (2%)
Fortune 101-200	97	82 (85%)	11 (11%)	1 (1%)
Fortune 201-300	80	71 (89%)	5 (6%)	1 (1%)
Fortune 301-400	86	76 (88%)	7 (8%)	2 (2%)
Fortune 401-500	79	71 (90%)	7 (9%)	1 (1%)
Total	435	383 (88%)	36 (8%)	7 (2%)
By Industry Group				
Aerospace	15	15 (100%)	0 (0%)	0 (0%)
Apparel	11	11 (100%)	0 (0%)	0 (0%)
Beverages	9	9 (100%)	0 (0%)	0 (0%)
Chemicals	36	34 (94%)	2 (6%)	0 (0%)
Electronics, Appliances	39	35 (90%)	3 (8%)	1 (3%)
Food	44	37 (84%)	6 (14%)	1 (2%)
Furniture	1	1 (100%)	0 (0%)	0 (0%)
Glass, Concrete, Abrasives, Gypsum	15	13 (87%)	2 (13%)	0 (0%)
Industrial and Farm Equipment	35	32 (91%)	2 (6%)	0 (0%)
Leather	1	0 (0%)	0 (0%)	1 (100%)
Measuring, Scientific, Photographic Equipment	15	14 (93%)	1 (7%)	0 (0%)
Metal Manufacturing	23	13 (57%)	3 (13%)	3 (13%)
Metal Products	20	18 (90%)	2 (10%)	0 (0%)
Mining, Crude Oil Production	9	8 (89%)	1 (11%)	0 (0%)
Motor Vehicles	15	9 (60%)	3 (20%)	0 (0%)
Musical Instruments, Toys, Sporting Goods	4	3 (75%)	1 (25%)	0 (0%)
Office Equipment (including computers)	12	12 (100%)	0 (0%)	0 (0%)
Paper, Fiber, and Wood Products	27	25 (93%)	2 (7%)	0 (0%)
Petroleum Refining	31	31 (100%)	0 (0%)	0 (0%)
Pharmaceuticals	19	18 (95%)	1 (5%)	0 (0%)
Publishing, Printing	17	17 (100%)	0 (0%)	0 (0%)
Rubber, Plastic Products	11	8 (73%)	2 (18%)	0 (0%)
Shipbuilding, Railroad, Transportation Equipment	6	3 (50%)	3 (50%)	0 (0%)
Soaps, Cosmetics	7	7 (100%)	0 (0%)	0 (0%)
Textiles, Vinyl Flooring	10	8 (80%)	1 (10%)	1 (10%)
Tobacco	3	2 (67%)	1 (33%)	0 (0%)
By Fortune 50				
Non-Industrial Groups				
Commercial Banking	47	47 (100%)	0 (0%)	0 (0%)
Retailing	35	32 (91%)	3 (9%)	0 (0%)
Transportation	39	31 (79%)	5 (13%)	2 (5%)
Utilities	50	47 (94%)	3 (6%)	0 (0%)
Total	171	157 (92%)	11 (6%)	2 (1%)
Industry & Non-Industry Total	606	540 (89%)	47 (8%)	9 (1%)

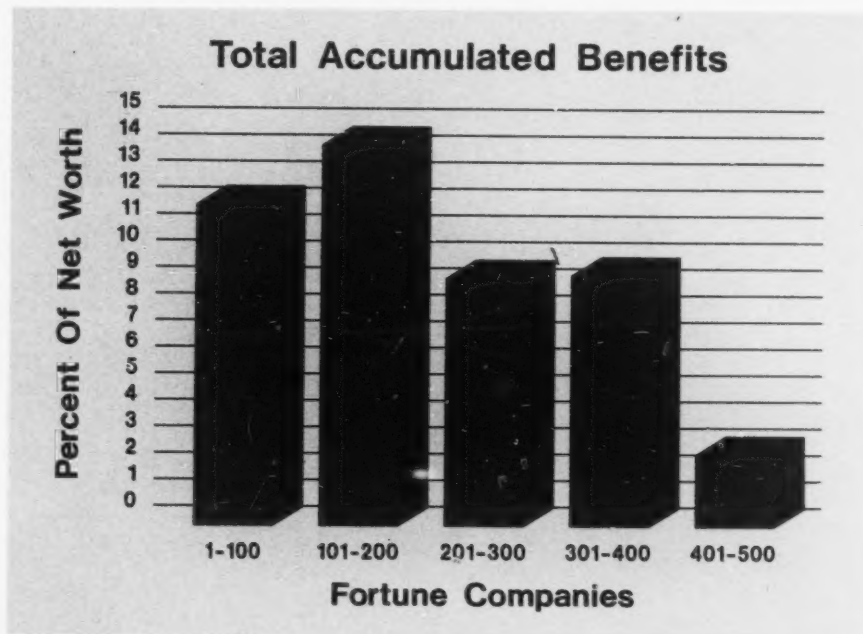
		Companies Reporting Unfunded Vested Benefits		Aggregate For Survey Group		
UVB Equal To 20 - 29.9% Of Net Worth	UVB Equal To At Least 30% Of Net Worth	Number Of Companies	UVB As A Percentage Of Net Worth (Composite)	UVB (\$ Millions)	Net Worth (\$ Millions)	UVB As A Percentage Of Net Worth (Composite)
0 (0%)	2 (2%)	10	5.8%	\$2,051.7	\$401,724.0	0.5%
0 (0%)	3 (3%)	15	14.8%	1,979.8	101,546.2	2.0%
1 (1%)	2 (3%)	9	14.0%	487.1	46,637.7	1.0%
0 (0%)	1 (1%)	10	11.7%	339.7	29,213.9	1.2%
0 (0%)	0 (0%)	8	3.9%	49.7	15,269.0	0.3%
1 (0%)	8 (2%)	52	8.7%	\$4,908.0	\$594,390.8	0.8%
0 (0%)	0 (0%)	0	0.0%	\$ 0.0	\$ 20,309.3	0.0%
0 (0%)	0 (0%)	0	0.0%	0.0	5,554.1	0.0%
0 (0%)	0 (0%)	0	0.0%	0.0	8,850.5	0.0%
0 (0%)	0 (0%)	2	5.0%	33.7	46,696.1	0.1%
0 (0%)	0 (0%)	4	9.9%	134.9	43,873.7	0.3%
0 (0%)	0 (0%)	7	1.7%	108.4	30,526.8	0.4%
0 (0%)	0 (0%)	0	0.0%	0.0	206.2	0.0%
0 (0%)	0 (0%)	2	4.0%	30.9	10,794.4	0.3%
0 (0%)	1 (3%)	3	17.8%	290.4	24,376.2	1.2%
0 (0%)	0 (0%)	1	17.8%	16.5	92.4	17.8%
0 (0%)	0 (0%)	1	4.4%	11.7	21,295.8	0.1%
1 (4%)	3 (13%)	10	18.3%	1,515.3	19,412.7	7.8%
0 (0%)	0 (0%)	2	5.9%	41.7	9,110.2	0.5%
0 (0%)	0 (0%)	1	0.1%	0.7	10,612.8	0.0%
0 (0%)	3 (20%)	6	8.6%	2,063.5	35,428.9	5.8%
0 (0%)	0 (0%)	1	0.1%	0.1	1,386.3	0.0%
0 (0%)	0 (0%)	0	0.0%	0.0	42,374.0	0.0%
0 (0%)	0 (0%)	2	5.0%	37.0	27,046.3	0.1%
0 (0%)	0 (0%)	0	0.0%	0.0	166,559.6	0.0%
0 (0%)	0 (0%)	1	0.2%	4.8	24,679.9	0.0%
0 (0%)	0 (0%)	0	0.0%	0.0	9,175.3	0.0%
0 (0%)	1 (9%)	3	24.2%	470.3	8,549.8	5.5%
0 (0%)	0 (0%)	3	2.6%	112.2	6,269.0	1.8%
0 (0%)	0 (0%)	0	0.0%	0.0	4,959.5	0.0%
0 (0%)	0 (0%)	2	4.7%	27.1	4,128.8	0.7%
0 (0%)	0 (0%)	1	0.4%	8.9	12,125.6	0.1%
0 (0%)	0 (0%)	0	0.0%	0.0	\$ 57,258.7	0.0%
0 (0%)	0 (0%)	3	0.5%	10.0	38,783.5	0.0%
0 (0%)	1 (3%)	8	7.7%	890.1	34,045.6	2.6%
0 (0%)	0 (0%)	3	0.8%	44.5	187,414.6	0.0%
0 (0%)	1 (1%)	14	5.1%	\$ 944.6	\$317,502.4	0.3%
1 (0%)	9 (1%)	66	7.8%	\$5,852.6	\$911,893.2	0.6%

10. Ratio of Unfunded Total Accumulated Benefits to Net Worth, 1983

The ratio of total accumulated benefits to net worth is, as expected, slightly higher than the ratio of vested benefits analyzed in Chapter 9. 110 companies (out of 605) have some unfunded benefits. For these companies only, the unfunded portion could be fully funded by additional assets equal to 10.4% of the composite company's net worth. Eleven of the 605

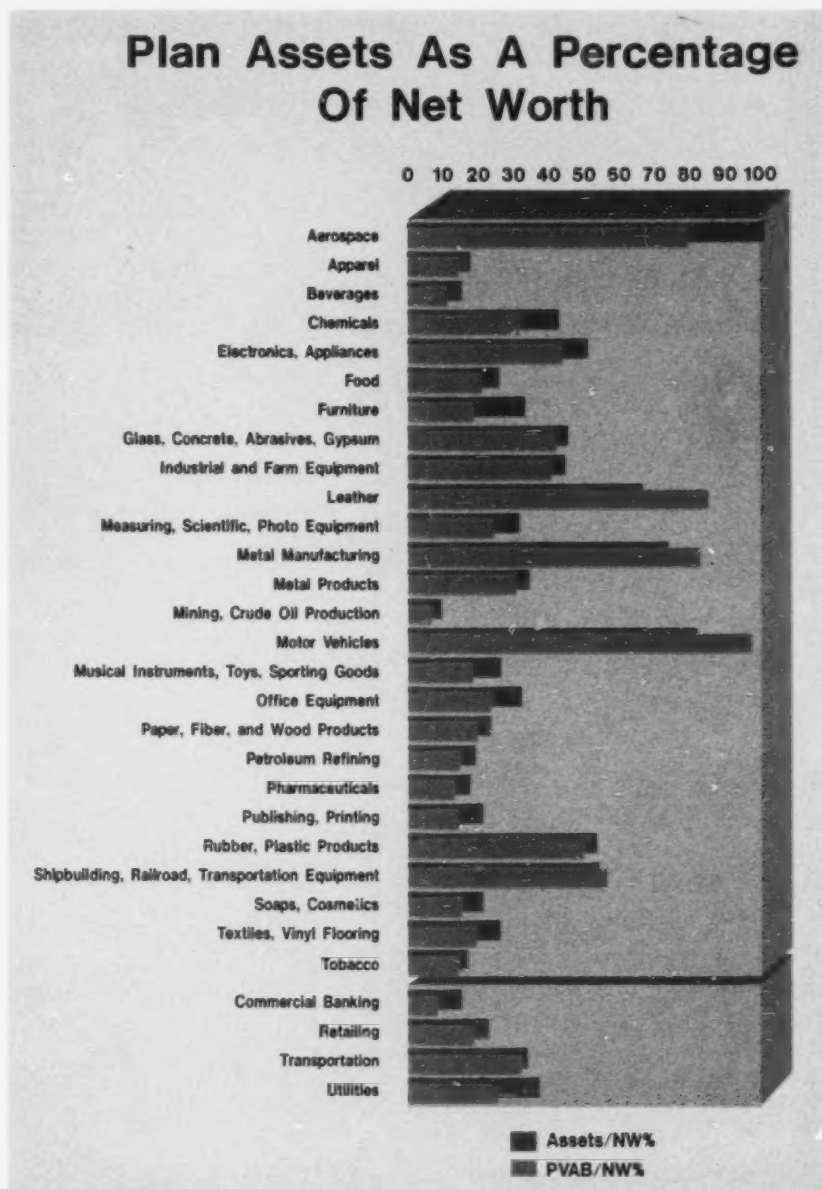
companies would require additional assets equal to 30% or more of corporate net worth.

The present value of unfunded accumulated benefits — the largest unfunded potential liability of a plan — is not sufficiently in excess of plan assets to constitute a threat to the composite company.



How large are the unfunded liabilities of pension plans, compared to the net worth of their sponsoring corporations? Unfunded total accumulated benefits provide the test. The present value of unfunded vested and non-vested benefits, on weighted average, is 10.4% of the aggregate net worth of the companies that report unfunded liabilities.

The combined plan assets of the 700 Fortune companies are destined to pay retirement benefits to some 20 million workers — 23% of the nation's workforce. The companies making these commitments are among the elite of corporate America. The \$297 billion they hold in their pension funds is equal to 36% of their combined net worth.



A FINAL WORD. . .

The 1984 Johnson & Higgins *Executive Report On Large Corporate Pension Plans* studies the financial information disclosed by the country's largest industrial and non-industrial enterprises. Our survey results clearly suggest that the first post-ERISA decade, despite the vagaries of inflation — recession — recovery, has produced a generally sound pension economy. It seems equally clear that private sector pension plans are as intricately involved in the nation's money management as in its retirement security, and that pension decisions are ultimately corporate financial decisions. Successive *Executive Reports* will continue to trace the effects of these decisions.

Exhibit 10.

Ratio of Unfunded Total Accumulated Benefits to Net Worth, 1983

			Detailed Distribution Of Ratio Of Unfunded Total Accumulated Benefits To Net Worth	
By Fortune 500 Ranks	Number Of Companies	Companies Having No UAB	UAB Equal To 1 - 9.9% Of Net Worth	UAB Equal To 10 - 19.9% Of Net Worth
Fortune 1-100	93	76 (82%)	12 (13%)	1 (1%)
Fortune 101-200	97	75 (77%)	15 (15%)	3 (3%)
Fortune 201-300	80	64 (80%)	10 (13%)	2 (3%)
Fortune 301-400	85	67 (79%)	13 (15%)	3 (4%)
Fortune 401-500	79	62 (78%)	16 (20%)	1 (1%)
Total	434	344 (79%)	66 (15%)	10 (2%)
By Industry Group				
Aerospace	15	14 (93%)	1 (7%)	0 (0%)
Apparel	11	9 (82%)	2 (18%)	0 (0%)
Beverages	9	8 (89%)	1 (11%)	0 (0%)
Chemicals	36	31 (86%)	5 (14%)	0 (0%)
Electronics, Appliances	39	31 (79%)	5 (13%)	2 (5%)
Food	44	34 (77%)	9 (20%)	0 (0%)
Furniture	1	1 (100%)	0 (0%)	0 (0%)
Glass, Concrete, Abrasives, Gypsum	15	11 (73%)	2 (13%)	2 (13%)
Industrial and Farm Equipment	35	27 (77%)	7 (20%)	0 (0%)
Leather	1	0 (0%)	0 (0%)	1 (100%)
Measuring, Scientific, Photographic Equipment	15	12 (80%)	3 (20%)	0 (0%)
Metal Manufacturing	23	9 (39%)	6 (26%)	1 (4%)
Metal Products	20	15 (75%)	5 (25%)	0 (0%)
Mining, Crude Oil Production	8	8 (100%)	0 (0%)	0 (0%)
Motor Vehicles	15	6 (40%)	5 (33%)	1 (7%)
Musical Instruments, Toys, Sporting Goods	4	3 (75%)	1 (25%)	0 (0%)
Office Equipment (including computers)	12	11 (92%)	1 (8%)	0 (0%)
Paper, Fiber, and Wood Products	27	23 (85%)	4 (15%)	0 (0%)
Petroleum Refining	31	30 (97%)	1 (3%)	0 (0%)
Pharmaceuticals	19	17 (89%)	2 (11%)	0 (0%)
Publishing, Printing	17	16 (94%)	1 (6%)	0 (0%)
Rubber, Plastic Products	11	8 (73%)	2 (18%)	0 (0%)
Shipbuilding, Railroad, Transportation Equipment	6	3 (50%)	1 (17%)	2 (33%)
Soaps, Cosmetics	7	7 (100%)	0 (0%)	0 (0%)
Textiles, Vinyl Flooring	10	8 (80%)	1 (10%)	1 (10%)
Tobacco	3	2 (67%)	1 (33%)	0 (0%)
By Fortune 50 Non-Industrial Groups				
Commercial Banking	47	46 (98%)	1 (2%)	0 (0%)
Retailing	35	29 (83%)	6 (17%)	0 (0%)
Transportation	39	30 (77%)	6 (15%)	0 (0%)
Utilities	50	46 (92%)	4 (8%)	0 (0%)
Total	171	151 (88%)	17 (10%)	0 (0%)
Industry & Non-Industry Total	605	495 (82%)	83 (14%)	10 (2%)

**Companies Reporting
Unfunded Total
Accumulated Benefits**

UAB Equal To 20 - 29.9% Of Net Worth	UAB Equal To At Least 30% Of Net Worth	Number Of Companies	UAB As A Percentage Of Net Worth (Composite)
0 (0%)	.4 (4%)	17	12.2%
1 (1%)	3 (3%)	22	14.5%
2 (3%)	2 (3%)	16	9.4%
1 (1%)	1 (1%)	18	9.6%
0 (0%)	0 (0%)	17	2.8%
4 (1%)	10 (2%)	90	12.0%
0 (0%)	0 (0%)	1	4.2%
0 (0%)	0 (0%)	2	0.7%
0 (0%)	0 (0%)	1	2.9%
0 (0%)	0 (0%)	5	1.1%
1 (3%)	0 (0%)	8	6.9%
1 (2%)	0 (0%)	10	3.1%
0 (0%)	0 (0%)	0	0.0%
0 (0%)	0 (0%)	4	4.4%
0 (0%)	1 (3%)	8	6.5%
0 (0%)	0 (0%)	1	19.2%
0 (0%)	0 (0%)	3	2.0%
2 (9%)	5 (22%)	14	17.5%
0 (0%)	0 (0%)	5	1.7%
0 (0%)	0 (0%)	0	0.0%
0 (0%)	3 (20%)	9	20.6%
0 (0%)	0 (0%)	1	0.5%
0 (0%)	0 (0%)	1	0.5%
0 (0%)	0 (0%)	4	4.8%
0 (0%)	0 (0%)	1	0.7%
0 (0%)	0 (0%)	2	2.4%
0 (0%)	0 (0%)	1	0.4%
0 (0%)	1 (9%)	3	29.0%
0 (0%)	0 (0%)	3	9.0%
0 (0%)	0 (0%)	0	0.0%
0 (0%)	0 (0%)	2	5.7%
0 (0%)	0 (0%)	1	1.7%
0 (0%)	0 (0%)	1	0.2%
0 (0%)	0 (0%)	6	1.5%
2 (5%)	1 (3%)	9	9.2%
0 (0%)	0 (0%)	4	1.0%
2 (1%)	1 (1%)	20	4.7%
6 (1%)	11 (2%)	110	10.4%

Aggregate For Survey Group

UAB (\$ Millions)	Net Worth (\$ Millions)	UAB As A Percentage Of Net Worth (Composite)
\$ 7,394.3	\$401,724.0	1.8%
2,821.1	101,546.2	2.8%
711.7	46,637.7	1.5%
499.9	28,695.9	1.7%
89.9	15,269.0	0.6%
\$11,516.9	\$593,872.8	1.9%
21.0	20,309.3	0.1%
8.6	5,554.1	0.2%
1.1	8,850.5	0.0%
76.9	46,696.1	0.2%
391.2	43,873.7	0.9%
249.7	30,526.8	0.8%
0.0	206.2	0.0%
97.0	10,794.4	0.9%
382.4	24,376.2	1.6%
17.7	92.4	19.2%
18.8	21,295.8	0.1%
2,367.8	19,412.7	12.2%
70.0	9,110.2	0.8%
0.0	10,094.8	0.0%
6,636.6	35,428.9	18.7%
0.5	1,386.3	0.0%
2.3	42,374.0	0.0%
66.2	27,046.3	0.2%
1.6	166,559.6	0.0%
84.2	24,679.9	0.3%
0.9	9,175.3	0.0%
563.0	8,549.8	6.6%
388.7	6,269.0	6.2%
0.0	4,959.5	0.0%
32.6	4,128.8	0.8%
38.3	12,125.6	0.3%
0.5	57,258.7	0.0%
42.8	38,783.5	0.1%
1,110.2	34,045.6	3.3%
124.1	187,414.6	0.1%
\$ 1,277.6	\$317,502.4	0.4%
\$12,794.5	\$911,375.2	1.4%

Appendix:

Alphabetical List of Corporations

Represented, by Industry and Non-Industry Group

Aerospace

Avco
Boeing
Cessna Aircraft
Fairchild Industries
Gulfstream Aerospace
General Dynamics
Grumman
Lockheed
Martin Marietta
McDonnell Douglas
Northrop
Rockwell International
Rohr Industries
Signal Companies
Sundstrand
United Technologies

Apparel

Blue Bell
Cluett Peabody
Gulf & Western Industries
Hartmarx
INTERCO
Kellwood
Levi Strauss
Oxford Industries
Palm Beach
Phillips-Van Heusen
VF
Warnaco

Beverages

Anheuser-Busch
Brown-Forman Distillers
Coca-Cola
Coors (Adolph)
General Cinema
Heileman (G.) Brewing
MEI
Pabst Brewing
PepsiCo

Chemicals

Air Products & Chemicals
American Cyanamid
Avery International
Big Three Industries
Cabot
Celanese
Dexter
Dow Chemical
Dow Corning
Du Pont (E.I.) de Nemours
Engelhard
Ethyl
Fuller (H.B.)
Ferro
Grace (W.R.)

Hercules
Insilco
Koppers
Liquid Air
Lubrizol
Monsanto
Morton Thiokol
NL Industries
Nalco Chemical
National Distillers & Chemical
Olin
Pennwalt
Reichhold Chemicals
Rohm & Haas
SCM
Sherwin-Williams
Stauffer Chemical
Sun Chemical
Tyler
Union Carbide
Williams Companies

Electronics, Appliances

AMP
AT&T Technologies
Allegheny International
Bairnco
Champion Spark Plug
Cooper Industries
Diebold
E-Systems
Eaton
Emerson Electric
General Electric
General Instrument
Gould
Harvey Hubbell
Harris
Hoover
ITT
Intel
Johnson Controls
Litton Industries
M/A-Com
Magic Chef
Maytag
McGraw-Edison
Motorola
National Semiconductor
National Service Industries
North American Philips
Oak Industries
Pittway
Penn Central
ROLM
Raychem
Raytheon
Sanders Associates
Scott Fetzer

Scovill
Singer
Square D
Texas Instruments
Tracor
Varian Associates
Warner Communications
Westinghouse Electric
Whirlpool
White Consolidated Industries
Zenith Radio

Food

American Bakeries
Anderson Clayton
Archer-Daniels-Midland
Beatrice Foods
Borden
CPC International
Campbell Soup
Carnation
Central Soya
ConAgra
Consolidated Foods
Dart & Kraft
Dean Foods
Esmark
Federal Co.
Flowers Industries
Frederick & Herrud
General Foods
General Mills
Gerber Products
Gold Kist
Heinz (H.J.)
Hershey Foods
Hormel (Geo. A.)
IC Industries
Idle Wild Foods
International Multifoods
Interstate Bakeries
Kellogg
McCormick
Monfort of Colorado
Nabisco Brands
Norton Simon
Pillsbury
Quaker Oats
Ralston Purina
Smithfield Foods
Savannah Foods & Industries
Shaklee
Staley (A.E.) Manufacturing
Swift Independent
Tyson Foods
United Brands
Universal Foods
Wilson Foods
Wrigley (Wm. Jr.)

Furniture

Mohasco

Glass, Concrete, Abrasives, Gypsum

Anchor Hocking
Brockway
Certain-Teed
Corning Glass Works
Guardian Industries
Lafarge
Libbey-Owens-Ford
Lone Star Industries
Marville
Moore McCormack Resources
National Gypsum
Norton
Owens-Corning Fiberglas
Owens-Illinois
PPG Industries
U.S. Gypsum

Industrial and Farm Equipment

Allis-Chalmers
Baker International
Black & Decker Manufacturing
Borg-Warner
Briggs & Stratton
Brunswick
Bucyrus-Erie
Cameron Iron Works
Caterpillar Tractor
Cincinnati Milacron
Clark Equipment
Colt Industries
Combustion Engineering
Cummins Engine
Deere
Dover
Dresser Industries
Eagle-Picher Industries
Emhart
Federal-Mogul
Figgie International Holdings
Fuqua Industries
Hughes Tool
Ingersoll-Rand
Joy Manufacturing
Midland-Ross
Outboard Marine
Peabody International
Rexnord
Roper
Smith International
Tecumseh Products
Teledyne
Textron
Timken
U.S. Industries

Leather

Genesco

Measuring, Scientific, Photographic Equipment

AM International
Ametek
Bausch & Lomb
Becton Dickinson
Bell & Howell
EG&G
Eastman Kodak
Foxboro
General Signal
Lear Siegler
Minnesota Mining & Mfg.
Perkin-Elmer
Polaroid
Sybron
Tektronix
Xerox

Metal Manufacturing

Aluminum Co. of America
Amsted Industries
Armco
Asarco
Bethlehem Steel
Crane
Cyclops
Handy & Harman
Inland Steel
Interlake
Kaiser Aluminum & Chemical
LTV
Marmon Group
NVF
National Intergroup
Newmont Mining
Northwest Industries
Nucor
Phelps Dodge
Republic Steel
Revere Copper & Brass
Reynolds Metals
Wheeling-Pittsburgh Steel
Worthington Industries

Metal Products

American Can
Ball
CBI Industries
Ceco
Chromalloy American
Continental Group
Crown Cork & Seal
Easco
Gillette
Harsco
Hoover Universal

Illinois Tool Works

Masco
NL Industries
National Can
Parker Hannifin
Robertson (H.H.)
Snap-on Tools
Stanley Works
Trinity Industries

Mining, Crude-Oil Production

AMAX
Freeport-McMoRan
Inspiration Resources
Int'l Minerals & Chemical
Louisiana Land & Exploration
Mitchell Energy
Occidental Petroleum
Superior Oil
Vulcan Materials
Westmoreland Coal

Motor Vehicles

American Motors
Arvin Industries
Chrysler
Dana
Echlin
Ex-Cell-O
Ford Motor
Fruehauf
General Motors
International Harvester
PACCAR
Sealed Air
Sheller-Globe
Smith (A.O.)
TRW

Musical Instruments, Toys, Sporting Goods

AMF
Coleco Industries
Hillbrand Industries
Kidde
Mattel

Office Equipment (Includes Computers)

Amdahl
Apple Computer
Burroughs
Control Data
Data General
Datapoint
Digital Equipment
Hewlett-Packard
Honeywell
IBM

Office Equipment

NCR
Nashua
Pitney Bowes
Prime Computer
Sperry
Storage Technology
Tandem Computers
Wang Laboratories

Paper, Fiber, and Wood Products

Bemis
Boise Cascade
Champion International
Consolidated Papers
Crown Zellerbach
Dennison Manufacturing
Federal Paper Board
Fort Howard Paper
Georgia-Pacific
Great Northern Nekoosa
Hammermill Paper
International Paper
James River Corp. of Virginia
Kimberly-Clark
Louisiana-Pacific
Mead
Pottlatch
St. Regis
Scott Paper
Sonoco Products
Southwest Forest Industries
Stone Container
Tyco Laboratories
Union Camp
Westvaco
Weyerhaeuser
Willamette Industries

Petroleum Refining

Agway
Amerada Hess
American Petrofina
Ashland Oil
Atlantic Richfield
Charter
Coastal
Crown Central Petroleum
Diamond Shamrock
Exxon
GAF
Getty Oil
Gulf Oil
Holly
Kerr-McGee
Mapco
Mobil
Murphy Oil
Pacific Resources

Pennzoil
Phillips Petroleum
Quaker State Oil Refining
Shell Oil
Standard Oil of California
Standard Oil (Indiana)
Standard Oil (Ohio)
Sun
Tenneco
Texaco
Tosco
Unocal
Union Pacific
U.S. Steel
Witco Chemical

Pharmaceuticals

Abbott Laboratories
American Home Products
Baxter Travenol Laboratories
Bristol-Myers
Cooper Labs
Johnson & Johnson
Lilly (Eli)
Merck
Miles Laboratories
Pfizer
Rorer Group
Richardson-Vicks
Robins (A.H.)
Schering-Plough
Searle (G.D.)
SmithKline Beckman
Squibb
Sterling Drug
Upjohn
Warner-Lambert

Publishing, Printing

American Greetings
Capital Cities Communications
Deluxe Check Printers
Donnelley (R.R.) & Sons
Dow Jones
Gannett
Harte-Hanks Communications
Harcourt Brace Jovanovich
Knight-Ridder Newspapers
Macmillan
McGraw-Hill
Media General
Meredith
New York Times
Prentice-Hall
Time Inc.
Times Mirror
Tribune
Washington Post

Rubber, Plastic Products

Armstrong Rubber
Cooper Tire & Rubber
Dayco
Dorsey
Firestone Tire & Rubber
Gencorp
Goodrich (B.F.)
Goodyear Tire & Rubber
Rubbermaid
Uniroyal
Walter (Jim)

Shipbuilding, Railroad and Transportation Equipment

Allied
American Standard
Coachmen Industries
FMC
Fleetwood Enterprises
Mack Trucks
Ogden
Todd Shipyards

Soaps

Avon Products
Chesebrough-Pond's
Clorox
Colgate-Palmolive
Economics Laboratory
Int'l Flavors & Fragrances
Procter & Gamble
Revlon

Textiles, Vinyl Flooring

Armstrong World Industries
Burlington Industries
Collins & Aikman
Fieldcrest Mills
Lowenstein (M.)
Riegel Textile
Springs Industries
Stevens (J.P.)
United Merchants & Mfrs.
West Point-Pepperell

Tobacco

American Brands
Philip Morris
Reynolds (R.J.)

Commercial Banking

Allied Bancshares
Banc One Corp.
Bank of Boston Corp.
Bank of New York Co.
BankAmerica Corp.
Bankers Trust New York Corp.
Barnett Banks of Florida
Chase Manhattan Corp.
Chemical New York Corp.
Citicorp
Citizens & Southern Georgia Corp.
Comerica
Continental Illinois Corp.
CoreStates Financial Corp.
Crocker National Corp.
European American Bancorp.
First Bank System
First Chicago Corp.
First City Bancorp. of Texas
First Interstate Bancorp.
First Union Corp.
Harris Bankcorp.
InterFirst Corp.
Irving Bank Corp.
Manufacturers Hanover Corp.
Marine Midland Banks
Mellon National Corp.
Mercantile Texas Corp.
Michigan National Corp.
Morgan (J.P.) & Co.
National City Corp.
NBD Bancorp.
NCNB Corp.
Northern Trust Corp.
Norwest Corp.
PNC Financial Corp.
Republic New York Corp.
RepublicBank Corp.
Security Pacific Corp.
Southeast Banking Corp.
Southwest Bancshares
Sovran Financial Corp.
Sun Banks
Texas Commerce Bancshares
U.S. Bancorp.
Valley National Corp.
Wachovia Corp.
Wells Fargo & Co.

Retailing

Albertson's
Allied Stores
American Stores
ARA Services
Associated Dry Goods
Best Products
Brown Group
Carter Hawley Hale Stores
Dayton-Hudson
Eckerd (Jack)
Evans Products
Federated Department Stores
Giant Food
Great Atlantic & Pacific Tea
Household International
Jewel Companies
K mart
Kroger
Lowe's Companies
Lucky Stores
Macy (R.H.)
Marriott
May Department Stores
McDonald's
Melville
Mercantile Stores
Montgomery Ward
Penney (J.C.)
Publix Super Markets
Rapid-American
Revco D.S.
Safeway Stores
Sears, Roebuck and Co.
Service Merchandise
Southland
Stop & Shop Companies
Supermarkets General
Tandy
Toys R Us
Trans World
U.S. Shoe
Wal-Mart Stores
Waldbaum
Walgreen
Wickes Companies
Winn-Dixie Stores
Woolworth (F.W.)
Zayre Corp.

Transportation

Airborne Freight
Alexander & Baldwin
Allied Van Lines
American Carriers
AMR
Arco Pipe Line
Arkansas Best
BP Pipelines
Burlington Northern
Carolina Freight
Chicago and North Western
Transportation
Chicago, Milwaukee, St. Paul
and Pacific Railroad
Consolidated Freightways
CSX
Delta Air Lines
Eastern Air Lines
Emery Air Freight
Exxon Pipeline
Federal Express
Frontier Holdings
Illinois Central Gulf Railroad
Kansas City Southern Industries
Leaseway Transportation
Mayflower
Norfolk Southern
Northwest Airlines
Overnite Transportation
Ozark Air Lines
Pan American World Airways
Piedmont Aviation
PSA
Purolator
Republic Airlines
Rio Grande Industries
Roadway Services
Santa Fe Southern Pacific
Sohio Pipe Line
Southwest Airlines
Texas Air
Tidewater
Tiger International
Trans World Airlines
UAL
United Parcel Service
USAir
Western Air Lines
Yellow Freight System

Utilities

Allegheny Power System
American Electric Power
American Natural Resources
American Telephone & Telegraph
Arizona Public Service
Baltimore Gas & Electric
Carolina Power & Light
Central & South West
Cleveland Electric Illuminating
Columbia Gas System
Commonwealth Edison
Consolidated Edison
Consolidated Natural Gas
Consumers Power
Continental Telecom
Detroit Edison
Dominion Resources
Duke Power
El Paso Natural Gas
Enserch
Florida Power & Light
General Public Utilities
GTE
Gulf States Utilities
Houston Industries
Illinois Power
InterNorth
Long Island Lighting
Middle South Utilities
Niagara Mohawk Power
Northeast Utilities
Northern Indiana Public Service
Northern States Power
Ohio Edison
Pacific Gas & Electric
Pacific Lighting
Pacific Power & Light
Panhandle Eastern
Pennsylvania Power & Light
Philadelphia Electric
Public Service Co. of Indiana
Public Service Electric & Gas
Sonat
Southern California Edison
Southern Company
Texas Eastern
Texas Utilities
Transco Energy
Union Electric
United Telecommunications

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